



राष्ट्रीय प्रौद्योगिकी संस्थान कालिकट

National Institute of Technology Calicut

वार्षिक रिपोर्ट

ANNUAL REPORT

वार्षिक लेखा

ANNUAL ACCOUNTS

2012 - 2013



1.0 INTRODUCTION

1.1 MISSION STATEMENT

To develop high quality technical education and personnel with a sound footing on basic engineering principles, technical and managerial skills, innovative research capabilities and exemplary professional conduct to lead and to use technology for the progress of mankind, adapting themselves to changing technological environment with the highest ethical values as the inner strength.

1.2 VISION

International Standing of the Highest Calibre.

1.3 EDUCATION SYSTEM

Institute offers technical education based on a state of the art curriculum. The syllabi are designed and continuously updated in consultation with the experts and with the approval of the Senate. To meet with national requirement of high quality man power, Institute is not keeping any fixed number of the Ph.D Scholarship but proactively encourage the enrollment. All Undergraduate and Post graduate programmes have been designed in line with the IIT System, giving appropriate weights for the theory and practice.

1.4 NEW INITIATIVES

From 2002 admissions onwards, the curriculum & syllabi followed for the programmes offered in the institute are framed internally and vetted by experts in the relevant area. The institute senate finalizes the curriculum, syllabi, ordinances rules & regulations of various programmes. Major initiatives include the commencement of interdisciplinary and multidisciplinary programmes in cutting edge technology fronts.

2.0 AN OVERVIEW

2.1 HISTORICAL BACKGROUND

The National Institute of Technology Calicut (NITC), originally established in 1961 as a Regional Engineering College and got transformed to NIT on 26th June 2002, is one of the 30 similar institutions in the country. It is fully funded by Government of India. It is an Institute of National Importance under NIT Act 2007. This Institute mentors NIT Sikkim, which is one among the 10 new NITs added in the year 2009.

2.2 LOCATION

The institute is located at Chathamangalam, 22 km east of Calicut city, along the Kunnamangalam-Mukkam road and covers an area of over 120 hectares, at the foot of the Western Ghats. The Calicut Railway Station and Airport are respectively 22 km and 45 km away from the Campus.

2.3 CAMPUS

There are nine hostels and additional accommodation distributed in different residential units and one International Hostel with twenty semi-furnished rooms for men students. Construction of three new hostels for men with a total capacity of 2700 is in progress and one of them is partially occupied. One hostel with four blocks with an attached recreational centre and a megahostel with 500 rooms is available for women. The institute has a good number of staff quarters and a guest house with 20 rooms.

The library, computer centre and laboratories are well equipped. The institute campus has all the essential amenities required. There is a campus school managed by a society formed by faculty members, a branch of State Bank of India, a Post Office, a Telephone Exchange and canteens functioning within the institute campus. The institute has a Health Centre to look after the medical needs of the students, employees and their families. The institute has adequate facilities for indoor and outdoor games, recreation and co-curricular activities.

2.4 ADMINISTRATION

2.4.1 GOVERNANCE

Institute is governed by the NIT Act 2007 and the statutes. Board of Governors and the senate are the authorities of the Institute. President of India is the visitor to the Institute. Chairperson of the Board of Governors is nominated by the visitor.

2.4.2 Institute follows the multi-tier hierarchical administrative structure, with proper delegation from top to bottom. Director appointed by the Government of India is at the helm of the affairs. Registrar is the head of administration. Five Deans spearhead the consultative mechanism that assists the Director in

the administration and management. The academic units of Departments and Schools are headed by faculty and the administrative sections are headed by officers of appropriate rank.

2.5 ACADEMIC PROGRAMMES

The institute imparts technical education at the degree and post graduate levels viz., (1) Under-Graduate (UG) programme of four years duration leading to B.Tech Degree, (2) UG programme of five years duration leading to B.Arch. degree, (3) Post-Graduate (PG) programme of two years duration leading to M.Tech degree, (4) PG programme of two years duration leading to M.Sc degree (5) PG programme of three years duration leading to M.Sc (Tech) degree (6) a programme of three years duration leading to the Master of Computer Applications (MCA) degree and (7) a two year MBA programme. All the programmes are offered in credit-semester pattern. In addition, Ph.D programmes in all disciplines are also offered.

2.6 PROGRAMMES OFFERED

(a) Bachelor of Architecture (B. Arch)

(b) Bachelor of Technology (B. Tech) in the following disciplines:

Biotechnology
 Chemical Engineering
 Civil Engineering
 Computer Science and Engineering
 Electronics and Communication Engineering
 Electrical and Electronics Engineering
 Engineering Physics
 Mechanical Engineering
 Production Engineering

(c) Master of Technology (M. Tech) Programmes

Department/School	Department/ School code	M. Tech Programmes	Pgm. Code
Civil Engineering	CE	1. Structural Engineering	CE61
		2. Traffic and Transportation Planning	CE62
		3. Offshore Structures	CE63
		4. Environmental Geotechnology	CE64
Computer Science & Engineering	CS	1. Computer Science and Engineering	CS61
		2. Computer Science & Engineering (Information Security)	CS62
Electrical Engineering	EE	1. Instrumentation and Control Systems	EE61
		2. Power Systems	EE62
		3. Power Electronics	EE63
		4. Industrial Power and Automation	EE64
Electronics and Communication Engineering	EC	1. Electronics Design and Technology	EC61
		2. Microelectronics and VLSI Design	EC62
		3. Telecommunication	EC63
		4. Signal Processing	EC64
Mechanical Engineering	ME	1. Industrial Engineering and Management	ME61
		2. Thermal Sciences	ME62
		3. Manufacturing Technology	ME63
		4. Energy Engineering and Management	ME64
		5. Material Science and Technology	ME65
Nano Science and Technology	NST	1. Nanotechnology (NS61)	NS61

(d) Master of Science (Technology)

M. Sc (Tech) in the following disciplines:

1. Polymer Science and Technology (CY61)

2. Mathematics and Scientific Computing (MA61)

3. Photonics (PH 61)

(e) Master of Science –

M.Sc (Tech) programmes listed in (d) above have been replaced by M. Sc in the following disciplines from 2012 admissions onwards:

1. Chemistry

2. Mathematics

3. Physics

(f) Master of Computer Applications (M C A)

M C A Programme is offered by the department of Computer Science and Engineering.

(g) Master of Business Administration (M B A)

M B A Programme is offered by the school of Management Studies.

(h) Doctor of Philosophy (Ph. D)

Ph. D programmes are offered by all the departments/schools.

2.7 ADMISSION PROCEDURE

Admission to B.Tech /B.Arch. programmes offered at NIT Calicut is made under the following categories:

Sl. No.	Category	Basis of Admission	Sanctioned Intake
1	Candidates from Kerala state (Home State Quota) †	*AIEEE Rank	469
2	Candidates from Other State (Other State Quota)†	*AIEEE Rank	468
3	Candidates from Lakshadweep & Kandvi (Home State Quota) †	*AIEEE Rank	33
4	Foreign Nationals \$	Marks in the Qualifying Examination	16
5	MEA Welfare Scheme #	Marks in the Qualifying Examination	4
6	Direct Admission of Students from Abroad (DASA) scheme	SAT II Score	94
Total			1084

† Reservations as per Central Govt. rules.

* All India Engineering Entrance Examination (AIEEE), conducted by the Central Board of Secondary Education (CBSE), New Delhi.

\$ Nominated by Ministry of External Affairs (Students Cell).

Nominated by Ministry of External Affairs

PG Programmes

- The admission to PG programmes in Engineering and Technology with fellowship is based on GATE score.
- The admission to PG sponsored seats are based on the written test/interview conducted by the respective departments.
- The admission to PG programmes of M.Sc and MBA without fellowship is based on Institution's Criteria.

Ph.D. Programmes

The admissions to Ph.D. programmes are based on merit and the written test/interview conducted by the Institute.

2.8 STUDENTS

The annual Techno-Management Festival TATHVA 2012 was successfully conducted in October 2012. 'Aavishkar' organized as part of TATHVA initiated by Socio Engineering Forum, brought electricity to an isolated school in Wayanad using Solar Energy.

The Student Affairs Council (SAC) 2012-13 was unanimously elected and formed. There were 64 branch councilors and 09 executive committee members.

A Blood donation camp as a social initiative and as a pre-RAGAM event was conducted and was very successful. SNEHARAGAM was organized this year also as a pre-RAGAM event, exclusively for physically challenged students of different schools of Kozhikode district which witnessed excellent participation.

The first revived edition of Camp-Art 2012-13, an inter-year cultural meet for our students, was conducted in January 2013. The event provided a platform for students to perform their talents in various cultural fields.

The annual cultural festival RAGAM 2013 was organized in March 2013. There were around 1000 registrations in various events participated by more than 50 colleges from southern region of the country.

2.9 EXAMINATION & EVALUATION

All academic programmes of the Institute follow the credit-semester system. Minimum credits to be earned for the award of various degrees are specified in the respective curricula. The modalities for continuous evaluation of various courses being offered by the departments are decided by the Institute Senate from time to time and are followed scrupulously. Slow learners are given adequate chances to pursue the studies

2.10 PLACEMENT

During the session 2012-13, 112 companies visited the campus for recruitment as against 102 firms visited last year. 112 firms made a total of 598 offers. The details are shown in **Annexure I**. **B.Tech Programme:** 470 out of 630 eligible B.Tech students (74.6%) got placed. The B.Tech placement details are shown in **Annexure I**.

Bio Technology students got 2 offers, out of eligible 5 students

Civil students got 48 offers, out of the 108 eligible students

Chemical students got 36 offers, out of the 55 eligible students

Computer Science students got 102 offers out of the 105 eligible students

Electronics students got 94 jobs out of the 104 eligible students

Electrical students got 82 jobs out of the 108 eligible students

Mechanical students got 83 jobs out of the 104 eligible students

Production students got 21 jobs out of the 26 eligible students

The highest salary (CTC) offered for B Tech is 18 lakhs by Amazon.com

The average salaries for the various branches are as follows.

Bio Technology	3.2 L
Civil Engineering	4.2 L
Chemical Engineering	4.2 L
Computer Science Engineering	7.5 L
Electronics & Communication Engineering	6.4 L
Electrical & Electronics Engineering	5.7 L
Mechanical Engineering	6.2 L
Production Engineering	4.5 L

B.Arch Programme: Only 12 students registered for placement, others were not interested. Out of the 12 students only 6 got placed. Few architecture companies shown interest in recruiting, but the students did not show interest in those companies. **The average salary is 3.3 L.**

M.Tech Programme: Out of the 246 M.Tech students 75 students got placed. **Overall 30% got placed as compared to 45% last year. One of the M Tech CS students got an international offer with Google for 1.3 Lakhs US \$, the highest salary for 2012-13.**

MCA Programme : Out of the 36 students 21 students got placed leading to 58% placement. The average salary is 4.8 L, highest 7 L and the lowest is 3.3L.

2.11 GAMES AND SPORTS

PHYSICAL EDUCATION OBJECTIVES

Unlike the REC days where physical education and sports was a voluntary activity and optional in the curriculum, the NIT scenario has physical education as a compulsory entity in the curriculum. The OT programme included in the time table comprise of Class-room orientation of freshers and a one-credit course in physical education (Code: ZZ1093). Mass participation and interclass activities ran simultaneously aiding in talent search, formation of institute teams, providing them specialist training by professional coaches and exposing them in as many interscholastic tournaments as possible. The participation percentage during 2012-13 was handicapped due to infrastructure shortage.

In the year 2012-13, all the first year students were introduced to Olympic values as part of the curriculum in one-credit course stressing on character development through sports & event-managerial abilities.

2.12 STAFF POSITION

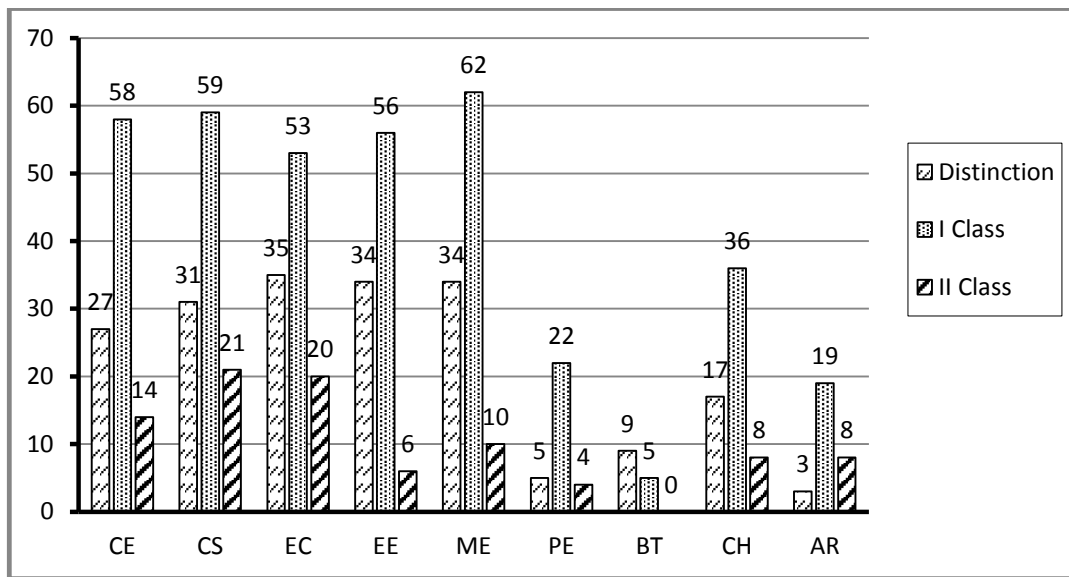
Teaching Staff

The sanctioned strength of teaching staff is 282. The department wise break-up of the sanctioned and in position strength of faculty is given below.

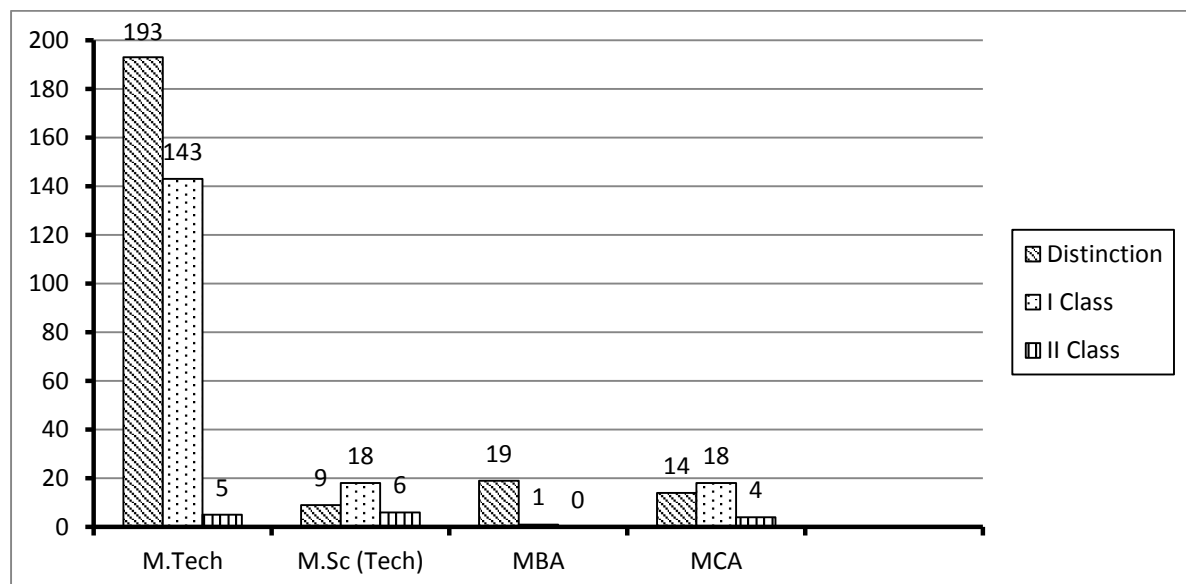
Department	Sanctioned	In position as on 31.03.2013
Architecture	12	7
Chemical Engineering	12	9
Civil Engineering	41	30
Computer Science & Engineering	33	21
Electrical & Electronics Engineering	38	26
Electronics & Communication Engineering	34	24
Mechanical Engineering	52	34
Mathematics	19	15
Physics, Chemistry and Humanities	18	14
Training & Placement & Physical Education	4	3
Biotechnology	---	7
School of Management Studies	---	4
Additional Posts Sanctioned	19	---
School of Nanoscience & Technology	---	6
Total	282	200

2.13 NOTABLE ACHIEVEMENTS (using Graphs, Charts, Diagrams)

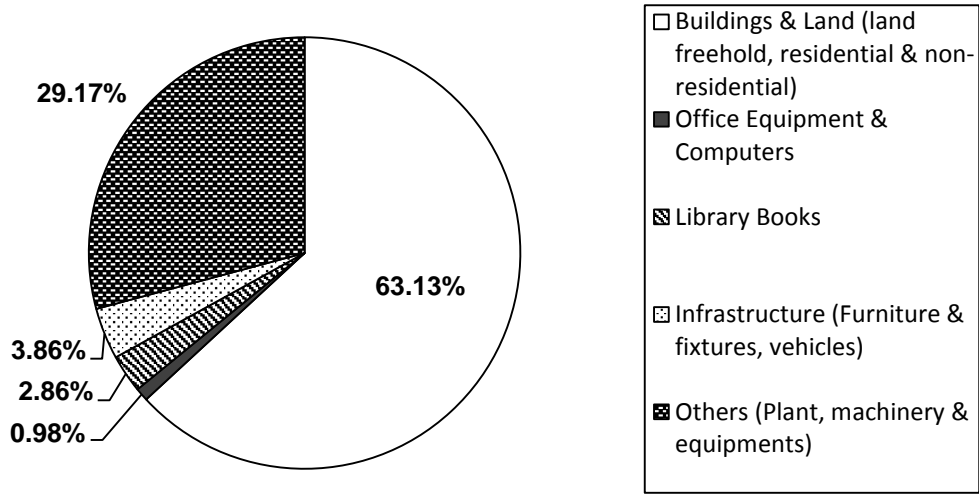
(i) Details of B.Tech & B.Arch students passed out in 2012-2013



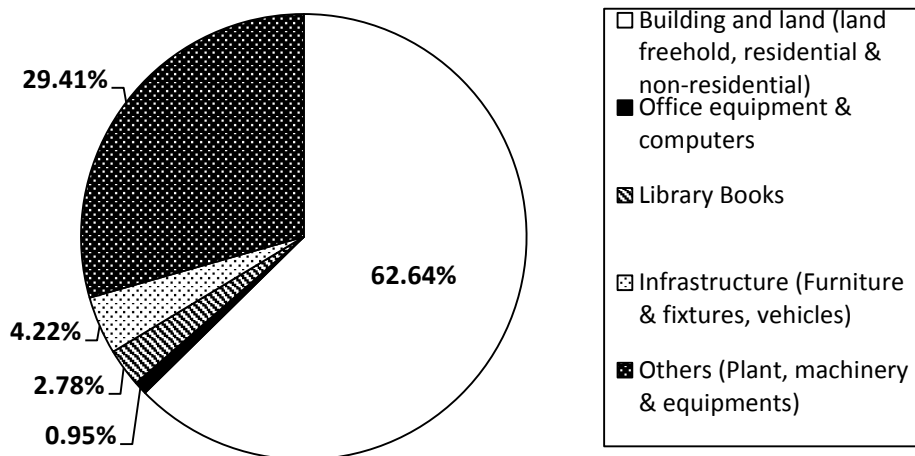
(ii) Details of M.Tech., MCA & MSc.Tech. students passed out in 2012-2013



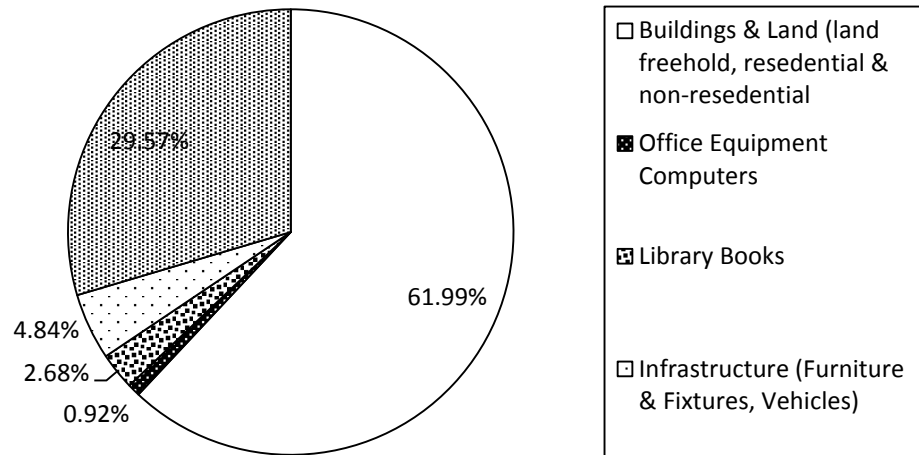
(iii) Details of Assets as on 31.03.2011



(iv) Details of Assets as on 31.03.2012



(v) Details of Assets as on 31.03.2013



3.0. THE STAFF

Director – Dr. M N Bandyopadhyay

REGISTRAR: Dr. Santosh G Thampi

DEANS

Dr. V K Govindan : Academic
Dr.N. Ganesan : Planning & Development (upto 23rd November 2012)
Dr. V. Mustafa : Planning & Development (from 23rd November 2012 onwards)
Dr.Jose Mathew : Research and Consultancy
Dr.K Vijayakumar : Faculty Welfare
Dr. C Muraleedharan : Students Welfare

3.1 ACADEMIC STAFF (Teaching)

DEPARTMENT OF ARCHITECTURE

Sl. No	Name	Designation	Qualification	Specialization
1.	Dr. P.P Anil Kumar.	Associate Professor & Head	B.Tech MCP Ph.D	Architectural Engg. City Planning
2.	Dr. Naseer M.A	Associate Professor	B.Tech MCP Ph.D	Architectural Engg. City Planning
3.	Dr. Kasthurba A. K	Associate Professor	B Arch M Tech Ph.D	Building Technology Architectural Conservation
4.	Mr. Mohammed Firoz (On QIP to IIT Kgp)	Assistant Professor	B. Arch. MURP	Architecture Urban and Regional Planning
5.	Ms Chithra .K	Assistant Professor	B. Arch M Planning	Architecture Town Planning
6.	Ms. Shyni	Assistant Professor	B. Tech M Planning	Architectural Engg, Housing
7.	Mr. Bimal P	Assistant Professor	B.Arch MCP	Architecture, City Planning
8.	Ms. Smitha G.	Assistant Professor	B. Arch. MURP	Architecture, Urban and Regional Planning
9.	Ms. Alolika Bhunia	Adhoc Lecturer	B.Arch MCP	City Planning
10	Ms. Deepa S	Adhoc Lecturer	B.Arch MCP	City Planning
11	Ms. Nima Viswanatha	Adhoc Lecturer	B.Tech Masters in Urban Planning	Urban and Land use Planning
12	Ms. Samhita Choudhuri	Adhoc Lecturer	B.Arch M.Sc. in Int. Real Estate Management	Real Estate Management
13	Mr. Soumyashanto Mandal	Adhoc Lecturer	B.Arch M Planning	Urban & Regional Planning
14	Mr. Sundeep Kumar	Adhoc Lecturer	B.Arch MCP	City Planning

DEPARTMENT OF CHEMICAL ENGINEERING

Sl. No.	Name	Designation	Qualification	Specialization
1	Dr.Lity Alen Varghese	Associate Professor, Head of Department	Ph.D	Polymer Technology
2	Dr.Shiny Joseph	Associate Professor	Ph.D	Mass transfer and Energy techniques
3	Dr.V.Sivasubramanian	Associate Professor	M.Tech., MBA,Ph.D	M.Tech: Petroleum Refining and Petrochemicals MBA: Operations Management Ph.D: Fluidization Engineering
4.	Dr. Aparna.K	Assistant Professor	Ph.D	Heat Transfer
5.	Smt. S. Bhuvaneshwari	Assistant Professor	M.Tech	Bioseparation Technology
6.	Mr.Vineesh Ravi	Assistant Professor	M.Tech	Plant Design
7.	Dr.N.Selvaraju	Assistant Professor	Ph.D	Modelling and Simulation
8.	Mr.Haribabu	Assistant Professor	M.Tech	Effluent Treatment in Inverse Fluidized bed reactor
9.	Dr. Malladi V Pavan Kumar	Assistant Professor	Ph.D	Process Control

DEPARTMENT OF CIVIL ENGINEERING

Sl. No.	Name	Designation	Qualification	Specialisation
1	Dr. P.Syamala	Professor and Head	M.E., Ph.D	Hydraulics
2	Dr. N.Ganesan	Professor	M.E, Ph.D	Structural Engg.
3	Dr. S.Chandrakaran	Professor	M.E., Ph.D	Geotechnical Engg
4	Dr. V.Mustafa	Professor	M.Tech., Ph.D	Structural Engg.
5	Dr. T.P.Somasundaran	Professor	M.Tech., Ph.D	Structural Engg
6	Dr. J.Sudhakumar	Professor	M.Tech., Ph.D	Building Technology
7	Dr. Mohammed Ameen	Professor	M.E., Ph.D	Structural Engg.
8	Dr. M.V.L.R. Anjaneyulu	Professor	M.Tech, Ph.D	Transportation Engg.
9	Dr. T.Zachariah Varghese	Professor	M.E, Ph.D	Structural Engg.
10	Dr. N.Sankar	Professor	M.Tech. Ph.D	Geotechnical Engg
11	Dr. A.P.Shashikala	Professor	M.Sc (Engg), Ph.D	Structural Engg.
12	Dr. P.V.Indira	Professor	M.Tech, Ph. D	Structural Engg.
13	Dr. T.M.Madhavan Pillai	Professor	M.Tech., Ph.D	Structural Engg.
14	Dr Santosh.G. Thampi	Associate Professor	M.Tech., Ph.D	Hydraulics
15	Dr. K Sasikumar	Associate Professor	M.Tech., Ph.D	Water Resources Engg.
16	Sri K.Saseendran	Associate Professor	B.Sc.(Geo.), M.Tech.	Geology
17	Dr. Arun C	Associate Professor	M.Tech., Ph.D	Building Technology
18	Dr. K. Krishna Murthy	Asst. Professor	M.Tech., Ph.D	Transportation Engg.
19	Dr. Praveen Nagarajan	Asst. Professor	M.Tech., Ph.D	Structural Engg.
20	Dr. Sajith A S	Asst. Professor	M.Tech	Structural Engg.
21	Sri. Harikrishna M	Asst. Professor	M.Tech	Transportation Engg.
22	Sri. George K Varghese	Asst. Professor	M.Tech	Environment Engg.
23	Smt. Reesha Bharath K	Asst. Professor	M.Tech	Construction Technology
24	Smt. Chitra N R	Asst. Professor	M.Tech	Hydraulics & Water Resources Engg
25	Dr. Pramada S K	Asst. Professor	M.Tech	Water Resources Engg
26	Dr. Mini Remanan	Asst. Professor	M.Tech., Ph.D	Structural Engg.
27	Dr. Vinu Palissery	Asst. Professor	M.S., Ph.D	Structural Engg.
28	Dr. Kodi Ranga Swamy	Asst. Professor	M.Tech., Ph.D	Geotechnical Engg
29	Dr. Mathava Kumar S	Asst. Professor	M.Tech., Ph.D	Environment Engg.
30	Dr. Sathish Kumar D	Asst. Professor	M.Tech	Remote Sensing &GIS
31	Sri. Siva Kumar M	Asst. Professor	M.Tech	Transportation Engg.

Adhoc Faculty				
32	Dr. Remya Neelancherry	Adhoc Faculty	M.Tech., Ph.D	
33	Dr. Roshni T	Adhoc Faculty	M.Tech., Ph.D	
34	Sri. Jayarajan P	Adhoc Faculty	M.Tech	
35	Smt Smitha K	Adhoc Faculty	M.Tech	
36	Sri. Adarsh P R	Adhoc Faculty	M.Tech	
37	Smt. Anjana M V	Adhoc Faculty	M.Tech	
38	Sri. Navaneeth M Thamban	Adhoc Faculty	M.Tech	
39	Smt. Salma Fathima Saleem	Adhoc Faculty	M.Tech	
40	Smt. Abhiya Abbas Mundol	Adhoc Faculty	M.Tech	
41	Sri. Jamshed Nassry Chalil	Adhoc Faculty	M.Tech	

DEPARTMENT OF COMPUTER SCIENCE & ENGINEERING

SI.No.	Name	Designation	Qualification	Specialisation
1.	Dr. Madhu Kumar S D	Associate Professor and Head	Ph. D	Database Systems, Middleware, Software Engineering
2.	Dr. V K Govindan	Professor	Ph. D	Image Processing, Medical Imaging, Agent Technology, Pattern Recognition, Document Imaging, Operating Systems, Biometrics based authentication, Segmentation, Data Compression
3.	Dr. Vineeth Paleri	Professor	Ph. D	Programming Languages & Compilers.
4.	Dr. Priya Chandran	Professor	Ph. D	Theoretical Computer Science, Analysis of Algorithms, Computer Architecture
5.	Mr. Abdul Nazeer K A	Associate Professor	M.Tech	Database Systems, Bioinformatics
6.	Dr. Murali Krishnan K	Associate Professor	Ph. D	Complexity theory, Algorithms, coding theory, Cryptography
7.	Mr. Vinod P	Assistant Professor	M.Tech	Theoretical Computer Science, Information Security
8.	Mr. Saidalavi Kalady	Assistant Professor	M. E	Intelligent Agents, Hardware Systems
9.	Ms. Saleena N	Assistant Professor	M.Tech	Program Analysis
10.	Ms. Subhasree M (On leave)	Assistant Professor	M. E	Mathematical Logic, Verification
11.	Ms. Subashini R (On leave)	Assistant Professor	M. Tech	Algorithms & Computer Architecture
12.	Mr. Sumesh T A (On leave)	Assistant Professor	M. Tech	Computer Networks
13.	Mr. Sreenivasa T M (On leave)	Assistant Professor	M. Tech	Bioinformatics, Data structures, Design & Analysis of algorithms
14.	Mr. Sreenu Naik Bhukya	Assistant Professor	M. Tech	Computer Networks, Network security & Cryptography , Dataware House & Data Mining and Operating Systems.
15.	Ms. Lijiya A	Assistant Professor	M. Tech	Artificial Intelligence
16.	Mr. Jimmy Jose	Assistant Professor	M. Tech	Image Processing
17.	Ms. Anu Mary Chacko	Assistant Professor	M. Tech	Computer Security, Software Engineering
18.	Ms. Pournami P.N.	Assistant Professor	M. Tech	Digital Image Processing, Data Structures, Analysis and Design of Algorithms.
19.	Mr. Jayaraj P B	Assistant Professor	M.Tech	High Performance Computing, Parallel Computing, Computational Drug Design, Operating Systems

20.	Dr. Gopakumar G	Assistant Professor	M. Phil (Bioinformatics) Ph.D	Bioinformatics , Fractals, Biocomputing Algorithms , Data Structures
21.	Dr. Sudeep K.S	Assistant Professor	Ph. D	Algorithms, Discrete Mathematics
22.	Dr. Mathew J Palakal	Adjunct Professor	Ph.D.	Biomedical Text Mining, Intelligent Information Management Systems
23.	Mansoor Alicherry	Adjunct Associate Professor	M.Phil and PhD	Systems, Network security, Algorithms, Cloud computing

DEPARTMENT OF ELECTRICAL ENGINEERING

SI No	Name	Designation	Qualification	Specialization
1	Dr. Abraham T Mathew	Professor	Ph.D. (IIT Delhi)	Instrumentation & Control
2	Dr. Ashok S	Professor	Ph.D. (IIT Bombay)	Power & Energy Systems
3	Dr. Jeevamma Jacob	Professor	Ph.D. (IIT Bombay)	Control Systems
4	Dr. M P Nandakumar	Professor	Ph.D. (IIT Kanpur)	Control Systems
5	Dr. Paul K Joseph	Professor	Ph.D. (IIT Madras)	Biomedical Instrumentation
6	Dr. Saly George	Professor	Ph.D. (REC Calicut)	Power Electronics
7	Dr. R Sreeram Kumar	Professor	Ph.D. (IISc Bangalore)	Power Systems
8	Dr. K S Sivanandan	Professor	Ph.D. (IIT Roorkee)	Instrumentation
9	Dr. Susy Thomas	Professor & Head	Ph.D. (IIT Bombay)	Control Systems
10	Dr. M V Vaidyan	Professor	Ph.D. (University of Calicut)	Control Systems
11	Mr. P Ananthkrishnan	Associate Professor	M.Tech. (IIT Madras)	Power Electronics & Drives
12	Mr. K S Suresh Kumar	Associate Professor	M.Tech. (IIT Madras)	Power Electronics
13	Dr. Elizabeth P Cheriyan	Associate Professor	Ph.D. (IIT Bombay)	Energy Systems
14	Ms. Hema Rani.P	Assistant Professor	M.Tech (IIT Kanpur)	Power Electronics
15	Dr. Jagadanand G	Assistant Professor	Ph.D. (NIT Calicut)	Signal Processing
16	Dr. Kumaravel S	Assistant Professor	Ph.D. (NIT Calicut)	Power Systems
17	Ms. Mija S J	Assistant Professor	M.Tech (CET TVM)	Control Systems
18	Dr. Mukti Barai	Assistant Professor	Ph.D. (IIT Kharagpur)	Power Electronics
19	Ms. Preetha.P	Assistant Professor	M.E. (IISc Bangalore)	High Voltage Engg.
20	Dr. Rijil Ramchand	Assistant Professor	Ph.D. (IISc,Bangalore)	Power Electronics
21	Dr. Sindhu T K	Assistant Professor	Ph.D. (IIT Chennai)	Power Systems & Biomedical Engg.
22	Ms. Subha. D.P	Assistant Professor	M.Tech (CET, TVM)	Power Systems
23	Mr. Subhash K.M.	Assistant Professor	M.Tech (NIT Calicut)	Instrumentation & Control
24	Dr. T K Sunil Kumar	Assistant Professor	Ph.D. (IIT Kharagpur)	Power Systems
25	Ms. Sunitha K	Assistant Professor	M.E. (IISc,Bangalore)	High Voltage Engg
26	Ms. Sunitha. R	Assistant Professor	M.Tech. (REC Calicut)	Power Systems

DEPARTMENT OF ELECTRONICS & COMMUNICATION ENGINEERING

Sl. No.	Name	Designation	Qualification	Specialization
1	Dr. Elizabeth Elias	Professor	Ph. D	Multirate Signal Processing
2	Dr. Lillykutty Jacob	Professor	Ph. D	Computer Networks
3	Dr. P. C. Subramaniam	Professor	Ph. D	Optical Communication
4	Dr. P. S. Sathidevi	Professor	Ph. D	Speech and Audio Processing
5	Dr. G. Abhilash	Asso. Professor	Ph. D	Signal Theory
6	Mrs. Lyla B. Das	Asso. Professor	M. Tech	Digital Communication
7	Dr. C. K. Ali	Asso. Professor and HOD	Ph. D	Communication Engineering
8	Dr. A. V. Babu	Asso. Professor	Ph. D	Communication Engineering
9	Dr. Rama Subrahmanyam Komaragiri	Asso. Professor	Ph. D	VLSI, MEMS and Nanoelectronics
10	Dr. S. M. Sameer	Asst. Professor	Ph. D	Wireless Communication
11	Dr. Sreelekha G.	Asst. Professor	Ph. D	Signal Processing
12	Dr. Deepthi P. P.	Asst. Professor	Ph. D	Secure Communication
13	Mr. R. Suresh	Asst. Professor	M. Tech	Digital Electronics
14	Mr. Jaikumar M. G.	Asst. Professor	M. Tech	Microelectronics
15	Mr. Dhanaraj K. J.	Asst. Professor	M. Tech	Digital Systems and Communication
16	Mr. V. Sakthivel	Asst. Professor	M. Tech	Advanced Communication Systems
17	Mr. Bhuvan B.	Asst. Professor	M. Tech	Electronic Design and Technology
18	Mr. Raghu C. V.	Asst. Professor	M. Tech	Electronic Design and Technology
19	Mrs. Suja K. J.	Asst. Professor	M. Tech	Optoelectronics
20	Mrs. Bindiya T. S.	Asst. Professor	M. Tech	VLSI Design
21	Mr. Ameer P. M.	Asst. Professor	M. Tech	Telecommunication
22	Mr. Jayakumar E. P.	Asst. Professor	M. Tech	VLSI Design
23	Mr. Sudhish N. George	Asst. Professor	M. Tech	Signal processing
24	Dr. Praveen Sankaran	Asst. Professor	Ph. D	Image Processing/ Pattern Classification

DEPARTMENT OF MECHANICAL ENGINEERING

Sl. No.	Faculty Name	Designation	Qualification	Specialization
1.	Sridharan R	Professor & Head	Ph.D.	Industrial Engineering
2.	Allesu K	Professor	Ph.D.	Manufacturing Science
3.	Arun P	Assistant Professor	Ph.D.	Energy Engineering
4.	Biju T. Kuzhiveli	Associate Professor	Ph.D.	Cryogenics
5.	Dhanish P B	Assistant Professor	Ph.D.	Production Engineering
6.	Gangadhara Kiran Kumar L	Assistant Professor	M. Tech.	Fluids and Thermal Sciences
7.	Ghulam Jilani	Professor	Ph.D.	Thermal Engineering
8.	Jagadeesha T	Assistant Professor	M. Tech.	Manufacturing Technology
9.	Jayadeep U B	Assistant Professor	M. Tech.	Solid Mechanics & Design
10.	Jayaraj S	Professor	Ph.D.	Computational Fluid Dynamics
11.	Jose Mathew	Professor	Ph.D.	Manufacturing Science
12.	Joseph M A	Professor	Ph.D.	Production Engineering
13.	Joy M L	Professor	Ph.D.	Machine Design & Tribology

14.	Madhusudanan Pillai V	Associate Professor	Ph.D.	Industrial Engineering
15.	Manu P V	Assistant Professor	M. Tech.	Propulsion Engineering
16.	Manu R	Assistant Professor	Ph.D.	Manufacturing Engineering
17.	Muraleedharan C	Professor	Ph.D.	Refrign & Air Conditioning
18.	Narayanan M D	Associate Professor	Ph.D.	Solid Mech. & Design
19.	Prabhakaran Nair K	Professor	Ph.D.	Machine Design & Tribology
20.	Radha Ramanan T	Assistant Professor	Ph.D.	Industrial Engineering
21.	Rajendra Kumar P K	Professor	Ph.D.	Machine Design & Tribology
22.	Ramachandran N	Professor	Ph.D.	Unconventional Machining
23.	Ramaraju A	Professor	Ph.D.	Fluid Mech. & Heat Transfer
24.	Ratnakumar K	Assistant Professor	M. Tech.	Industrial Management
25.	Rohini Kumar B	Assistant Professor	M. Tech.	Thermal Engineering
26.	Sarvoththama Jothi T J	Assistant Professor	Ph.D.	Thermal and Fluids Engineering
27.	Sekar K	Assistant Professor	M. Tech.	Manufacturing Technology
28.	Shaija A	Associate Professor	Ph.D.	CFD and Heat Transfer
29.	Sreenath A M	Assistant Professor	M. Tech.	Machine Design
30.	Srinivas M	Assistant Professor	M. Tech.	Energy Engineering
31.	Sudheer A P	Assistant Professor	M. E.	Manufacturing Engineering / Robotics
32.	Varaprasad G	Assistant Professor	M. Tech.	Industrial Engineering & Management
33.	Vijayakumar R	Professor	Ph.D.	Machining Science
34.	Vinay V. Panicker	Assistant Professor	M. Tech.	Industrial Engineering
35.	Hariharan C P	Programmer	B.Tech., M.B.A.	Management

DEPARTMENT OF MATHEMATICS

Sl. No.	Name	Designation	Qualification	Specialization
1	Dr. M.J. Jacob	Professor	M.Sc., Ph.D.	Stochastic Processes
2	Dr. Jessy John C	Professor	M.Sc., Ph.D.	Time series Modelling
3	Dr. V. Narayanan	Associate Professor & Head	M.Sc., Ph.D.	Queuing Theory
4	Dr. Chithra. A.V.	Associate Professor	M.Sc., Ph.D.	Operator Theory
5	Dr. Sunil Jacob John	Associate Professor	M.Sc., M. Phil., Ph.D.	Generalized Set Theory, Topology
6	Dr. M.S. Sunitha	Associate Professor	M.Sc., M. Phil. Ph.D.	Fuzzy Graph Theory
7	Dr. C. M. Sushama	Associate Professor	M.Sc., Ph.D.	Fuzzy Optimization
8	Dr. Satyananda Panda	Associate Professor	M.Sc., Ph.D.	Computational Fluid Dynamics, Modeling & Scientific Computing
9	Sri. Lineesh. M.C.	Asst. Professor	M.Sc.	Time Series Modelling
10	Sri. Sanjay. P.K.	Asst. Professor	M.Sc,Ph.D.	Harmonic Analysis
11	Dr. Krishnan Paramasivam	Asst. Professor	M.Sc., Ph.D.	Algebraic Graph Theory, Algorithms & Complexity
12	Dr. Sunil Mathew	Asst. Professor	M.Sc. ,Ph.D.	Fuzzy Graph Theory, Biocomputational modeling, Fractal Geometry

13	Dr. Mahesh Kumar	Asst. Professor	M.Sc., Ph.D.	Applied Statistics, Reliability of systems
14	Dr. Suresh Kumar Nadupuri	Asst. Professor	M.Sc. , Ph.D.	Numerical Methods and Scientific Computing.
15	Dr. Ashish Awasthi	Asst. Professor	M.Sc. ,Ph.D.	Numerical Analysis, Singular Perturbation

DEPARTMENT OF CHEMISTRY

Sl. No.	Name	Designation	Qualification	Specialization
1	Dr. G. Unnikrishnan	Professor	M. Sc. Ph.D.	Polymer Science & Technology
2	Dr. Lakshmi C.	Associate Professor	M. Sc. Ph.D.	Bio-organic Chemistry
3	Dr. Lisa Sreejith	Assistant Professor	M. Sc. M Phil, Ph.D.	Surface Chemistry
4	Dr. Sujith A	Assistant Professor	M. Sc. Ph.D.	Polymer Technology
5	Dr. Suni Vasudevan	Assistant Professor	M. Sc. Ph.D.	Inorganic Chemistry
6	Dr. C. Arunkumar	Assistant Professor	M. Sc. Ph.D.	Bio-inorganic Chemistry
7	Dr. Parameswaran Pattiyil	Assistant Professor	M. Sc. Ph.D.	Theoretical & Computational Chemistry

DEPARTMENT OF PHYSICS

Sl. No.	Name	Designation	Qualification	Specialization
1.	Dr. P. Predeep	Professor	M.Sc., Ph.D.	Condensed Matter Physics – Molecular Electronics, Photonics and Advanced Materials
2.	Dr. Chandrasekharan. K.	Professor	M.Sc., Ph.D.	Solid state physics, Nonlinear Optics
3.	Dr. Raghu Chathanathodi	Associate Professor & HOD	M.Sc., Ph.D.	Computational Condensed Matter Physics
4.	Dr. M. K. Ravi Varma	Associate Professor	M.Sc., Ph.D.	Atmospheric Optics & Instrumentation
5.	Dr. Vari Sivaji Reddy	Assistant Professor	M.Sc., M.Phil, Ph.D.	Condensed Matter Physics – Organic and Nano Electronics, Photonics
6.	Dr. P. K. Madhavan Unni	Assistant Professor	M.Sc., Ph.D.	Soft condensed matter physics, Critical point phenomena
7.	Dr. Aji A. Anappara	Assistant Professor	M.Sc, M.Phil, Ph.D.	Light-matter interaction in nanoscale, Semiconductor heterostructures, Graphene Photonics

CENTRE FOR TRAINING & PLACEMENT

Sl. No.	Name	Designation	Qualification	Specialization
1.	Dr T. K. Suresh Babu	Professor (T & P)	M.E.,Ph.D	Management Science

PHYSICAL EDUCATION SECTION

Sl. No.	Name	Designation	Qualification	Specialization
1	Dr. A.M. Najeeb	Associate Professor	M.A, M.Phil., Ph.D	Exercise Physiology, Olympic Values Education, Sports Infrastructure management.
2	Sri. Sunil M.S	Assistant Professor	M.P.Ed., M.Phil.	Physiology, Soccer training.

SCHOOL OF NANO SCIENCE & TECHNOLOGY

Sl. No.	Name	Designation	Qualification	Specialization
1	Dr. C. B. Sobhan	Professor and Head	Ph.D	Thermal Engineering
2	Dr. N. Sandhyarani	Associate Professor	Ph.D	Chemistry
3	Dr. Sarit P. Sathian	Assiatnt Professor(AGP 8000)	Ph.D	Fluid Mechanics
4	Dr. Sajith V.	Assistant Professor(AGP 7000)	Ph.D	Thermal Engineering
5	Dr. Soney Varghese	Assistant Professor(AP 7000)	Ph.D	Chemistry
6	Mr.Hanas T.	Assistant Professor(AGP 6000)	M.Tech	Materials Science
7	Mr.Shijo Thomas	Asisstant Professor(AGP 6000)	M.Tech	Thermal Engineering

SCHOOL OF MANAGEMENT STUDIES

Sl. No.	Name	Designation	Qualification	Specialization
1	Dr.N.Sudarsan	Professor	Ph.D	Management
2	Dr. Muhammad Shafi	Assistant Professor	Ph.D	Management
3	Dr. S. Sunitha	Assistant Professor	Ph.D	Economics
4	Dr. Preeti Navaneeth	Assistant Professor	Ph.D	English

SCHOOL OF BIOTECHNOLOGY

S.No.	Name	Designation	Qualification	Specialization
1	Dr. Md. Anaul Kabir	Associate Professor	Ph. D.	Molecular Genetics, Genetic Engineering
2	Dr. Santhiagu A	Associate Professor	Ph. D.	Bioprocess Technology, Recombinant DNA Technology, Enzymology
3	Dr. Rajanikant G.K.	Associate Professor	Ph. D.	Radiation biology, Neuroscience
4	Dr. Prem Raj Pushpakaran	Assistant Professor	Ph. D.	Biochemistry, Microbiology, Molecular biology
5	Dr. R. Aswati Nair	Assistant Professor	Ph. D.	Molecular plant biotechnology, Molecular biology
6	Dr. Suchithra.T.V	Assistant Professor	Ph. D.	Microbiology, Enzymology
7	Dr. K. Rathinasamy	Assistant Professor	Ph. D.	Cell biology, Cancer research, Apoptosis

CENTRE FOR BIOMECHANICS

FACULTY

1. Dr Mohammed Ameen (Head), Professor of Civil Engineering
2. Dr T. M. Madhavan Pillai, Professor of Civil Engineering
3. Dr P.K. Rajendrakumar, Professor of Mechanical Engineering
4. Dr G. Abhilash, Associate Professor of Electronics Engineering
5. Dr. Vinu Palisery, Assistant Professor of Civil Engineering

ADJUNCT FACULTY

1. Dr T.S. Gopakumar, Professor & Head, Department of Orthopaedics, Medical College, Trivandrum.
2. Dr George Joseph, (Retd.) Professor & Head, Department of Physical Medicine & Rehabilitation, Medical College, Calicut.
3. Mr M. Sreekumar, Prosthetic & Orthotic Engineer, Department of Physical Medicine & Rehabilitation, Medical College, Calicut.

3.2 NON-ACADEMIC STAFF (NON-TEACHING STAFF)

Sl.No.	Name	Designation	Qualification
1.	Dr.Santosh G Thampi	Registrar	Ph.D.
2.	Mr. Raghunadhan T	Deputy Registrar (Stores & Purchase)	MA, M.Com., LLB-Low of Taxation, English Typewriting, English Stenography, LLM
3.	Mr. M Radhakrishnan	Deputy Registrar (Academic)	B.Sc., MBA, PG Diploma in Materials Management, PG Diploma in Personal Management and Industrial Relations
4.	Mr. P M Krishnan	Officer on Special Duty(on deputation) Sr. Audit Officer, AG's office	BSc. B Ed. SAS. RAE
5.	Mr. C Unnikrishnan	Officer on Special Duty(on deputation) Sr. Audit Officer, AG's office	B Com. SAS. RAE & CPD-I
6.	Mr. V Muraleedharan	Internal Audit Officer (on deputation) from AG's office	B Sc. SAS. RAE & CPD-I
7.	Dr. Celine A.A	Resident Medical Officer	BSc, MBBS
8.	Ms. Beena John	Divisional Accountant	Pre-Degree, Typewriting (English) Lower
9.	Ms. Sweety Mathew	Lib.Gr.III (Hr.Gr)	M.Sc., M L I Sc , UGC NET
10.	Ms. Laliitha Kumari P.S	Librarian Gr.IV (Hr. Gr)	BA, Bachelor of Lib and Information
11.	Mr. Balachandran Nair C.G	Librarian Gr.IV (Hr. Gr.)	BA, MLISc. Type (E&M)Higher
12.	Ms. Sobhana J	Librarian Gr.IV (Hr. Gr)	MA, Bachelors Degree in Library & Information Science
13.	Mr. Jayarajan.T	Librarian Gr.IV (Hr. Gr)	BA, bachelor of Lib and Information
14.	Ms. Latha. C	Librarian Gr.IV (Hr. Gr)	MA, Master of Degree in Library and Information Science, UGC. NET
15.	Mr. C P Balan	Library Attender	SSLC (failed)
16.	Mr. K P Shaju	Librarian Gr.IV	SSLC, Certificate in Library Science
17.	Mr. M K Chandramohan	Graphic Artist (Hr. Gr)	Bachelor of Fine Arts in Applied Arts
18.	Mr. K Jayaraman	Offset Machine Operator (Hr. Gr)	SSLC, Diploma in Printing and Technology
19.	Mr. P Abraham	Pharmacist	SSLC, Diploma Course in Pharmacy
20.	Ms. Rosamma V J	Staff Nurse (Hr. Gr)	SSLC, Certificate in General Nursing and Midwifery Examination

21.	Ms. Stella V C	Fair Copy Superintendent.	SSLC, Typewriting English & Malayalam (Lower & Higher), Short hand English (Lower)
22.	Mr. T Vijayan	Sr. Gr. Typist	SSLC, Typewriting English & Malayalam (Higher)
23.	Ms. Subhadra C K	Confidential Assistant Gr.I	SSLC, Typewriting English & Malayalam Higher Short hand English Lower
24.	Ms. V Vilasini	Confidential Assistant Gr.II (Hr. Gr.)	SSLC, Typewriting English & Malayalam Higher , Short hand English Lower
25.	Ms. Veluthakki C	Confidential Assistant Gr.II (Hr. Gr.)	SSLC, Typewriting English & Malayalam Higher , Short hand English Lower
26.	Mr. Sathianandan.P	UD Steward	SSLC, Typewriting English lower
27.	Mr. Narayanankutty. P	L.D Steward	SSLC
28.	Mr. Anwar Sadath. C	L.D Steward	PDC, Restaurant Counter Service, Typewriting English lower
29.	Ms. Devaki P P	Sr. Supdt	PDC
30.	Ms. C.P Rugmini	Sr.Supdt	SSLC Typewriting Eng.(H)
31.	Mr. A. Balan	Jr. Supdt	SSLC, Typewriting (E) Lower
32.	Mr. M. Reejish Kumar	Jr. Supdt	SSLC
33.	Mr. P. Muraleedharan	Jr.Supdt	SSLC
34.	Ms. K.Mini	U D Clerk	SSLC
35.	Ms. P. Prama	U D Clerk	SSLC
36.	Mr. A. Venugopal	U D Clerk	PDC
37.	Ms. P.P Karthiayani	U D Clerk	SSLC
38.	Mr. V. Hassan Mohammed	U D Clerk	SSLC
39.	Ms. P.M Madhavi	L D Clerk	SSLC, Typewriting English Lower
40.	Mr. S.M Shafi	U D Clerk	SSLC
41.	Mr. P. Praveen Kumar	U D Clerk	BA
42.	Mr. Petson Andrew	U D Clerk	BBA,MBA
43.	Mr. N. Sukumaran Nair	U D Clerk	BA
44.	Mr. Prasad .M.V	U D Clerk	BA, PGDCA(Software)
45.	Mr. Sasikumar K.T	U D Clerk	PDC
46.	Mr. K. Unnikrishnan	U D Clerk	SSLC, Typewriting English Higher, Malayalam Lower
47.	Ms. Soosy Kutty J.L	U D Clerk	BSc, Typewriting English Higher Malayalam Lower
48.	Ms. Juliet Das P.D	U D Clerk	MA, Typewriting English Higher
49.	Mr. Sethumadhavan Mecheri	UD Clerk	BA, Typewriting English Lower
50.	Mr. K.N Purushothaman Pillai	U D Clerk	SSLC, Typewriting English Higher
51.	Ms. C.K Kanakambujam	L D Clerk (on leave)	PDC
52.	Ms. G. Chandrika	U D Clerk	PDC
53.	Ms. P. Sindu	U D C on temporary basis	BA, Type writing English Lower , Word Processing-Computer Course, Office Automation Course
54.	Ms. Smera K.S.	L D Clerk	M.Sc. Computer Science,
55.	Ms. Mereena John	L D Clerk	B.Sc., Typewriting English Lower, Computer Word Processing.
56.	Ms. Sobhana T.	L D Clerk	B.Sc., PGDCA
57.	Mr. M.T Varghese	Assistant Engineer	PDC, NTC Trade-Electrician ,Diploma in EE, Wireman License Certificate of Electrical Wiring
58.	Mr. T.E Thomas	Assistant Engineer	SSLC, Diploma in CE,Part-time course Architectural Draughtsman-ship, Part time course on structural design and tall buildings
59.	Mr. P.Keraleeyan	Foreman,MED	SSLC, NTC-Mechanic Refrigeration & Air Conditioning Diploma in M.E, B.Tech.-ME.

60.	Mr. K.P Venugopal	Instructor, ECE	SSLC, NTC Mechanic General Electronics, NTC Electrician trade, Diploma in EE, Post Diploma in Communications, B.Tech. (ECE)
61.	Mr. T.K Sasidharan	Instructor, EED	PDC, NTC Electrician trade, Diploma in EE
62.	Mr. P. Anil Kumar	Supervisor, MED	SSLC, ITI Trade- Mechanic R&A/c, Diploma in ME
63.	Mr. A. K. Mohan Kumar	Asst.Engineer	SSLC, Diploma in Civil Engg., B.Tech.-CE.
64.	Mr. E. Pradeep Kumar	Supervisor, MED	Diploma
65.	Mr. P. Prabhakaran	Senior Mechanic (Sl.Gr), EMU	SSLC, Diploma in Electrical Engineering
66.	Mr. T.V Varghese	Senior Mechanic (Sl.Gr), Engineering Unit	SSLC, English Typewriting lower , Certificate in CE (2 years course)
67.	Mr. B. Venugopal	Lab Technician, EED	SSLC, NTC-wireman, Diploma in EE
68.	P.T. Ashok Kumar	Lab Technician, EED	SSLC, Certificate Exam in EE, Diploma in EE
69.	Mr. A. Rajagopalan	System Analyst (Hr.Gr)	BSc, PG Diploma in Operations Research & computer application, MSc, M.Tech.
70.	Mr. Santhosh Kumar. S	System Programmer	B.Sc., M.Sc.(maths), M.Sc in Information System, PG Diploma in Computer Engg, & in Software Tech., Degree of master of science in information system (University of Chester)
71.	Mr. G. Sasidharan Pillai	Computer Technician	BSC, Typewriting English & Malayalam Higher, Computer programming (COBOL), Console Operator Cum Programmer Asst. (NCVT), PG Diploma in computer Application
72.	Mr. V.R Ajayachandran	Computer Operator (Hr. Gr)	PDC, Diploma in ME, Post Diploma in Computer Application
73.	Pradeep Kumar K K	Instructor MED	SSLC, ITI Trade- Mechanic Motor Vehicle, Diploma in ME
74.	Rajendran M.K	Instructor MED	SSLC, NTC Trade –Mechanic Gen. Electronics, Diploma in ME
75.	Pradeep Kumar E	Supervisor, MED	Diploma
76.	Abhilash	Sr. Mechanic, Sl. Gr. MED	ITI Fitter, Diploma in ME
77.	Anandan P	Sr. Mechanic, Sl. Gr. MED	SSLC, Certificate Exam In Automobile Engineering
78.	Dharmarajan K	Sr. Mechanic, Sl. Gr. MED	SSLC(Failed), Plumber-Trade
79.	Joseph George P G	Sr. Mechanic, Sl. Gr.MED	SSLC, NTC-Turner
80.	Mohanan T P	Sr. Mechanic, Sl. Gr. MED	ITI Diesel Mechanic, SSLC
81.	Sasi. K K	Sr. Mechanic, Sl.Gr. MED	Pre Degree, Diploma in Computer Engg, Type Writing English Lower
82.	Velayudhan Kutty N P	Sr. Mechanic, Sl. Gr. MED	P D C, NCVT Electrical & Electronics, Diploma in ME
83.	Ajayan A	Sr. Mechanic MED	J.T.S L C(Foundry), NTC Electrician (Foundry)
84.	Eldho P Varghese	Sr. Mechanic MED	SSLC, NTC Mechanic Diesel, VHSE, Diploma in ME
85.	George T M	Sr. Mechanic MED	SSLC, NTC Trade-Fitter
86.	Manoj KG	Sr. Mechanic MED	THSLC (Trade-Turning), Diploma in ME
87.	Prasad Mochikkal Variath	Sr. Mechanic MED	SSLC, NTC Welder, Diploma in ME
88.	Reghu P V	Sr. Mechanic MED	JTSLC, Sheet Metal Diploma in M.E

89.	Sanal P R	Sr. Mechanic MED	P D C, NTC Mechanist (Trade)
90.	Shali Joseph	Sr. Mechanic MED	SSLC, NTC(Foundry Trade)
91.	Suresh K.C	Sr. Mechanic MED	SSLC, NTC Trade-Welder
92.	Surendran. P.K	Sr. Mechanic MED	SSLC, Trade Mechanist-NAC
93.	Unnikrishnan R	Sr. Mechanic MED	Pre Degree, Diploma in M.E (Machinist)
94.	Vasu TC	Sr. Mechanic MED	SSLC, NTC- Mechanic (Diesel)
95.	Mr. Mohanlal .D	Sr. Mechanic, CED	SSLC, NTC Trade Welder
96.	Mr. P. Sreenivasan	Sr. Mechanic, CED	SSLC, NTC Trade Plumber
97.	Mr. K. Shibu	Instructor, CED	SSLC, NTC Trade Plumber , Diploma in CE, Computer Shikshan
98.	Mr. K. Sahadevan Nair	Sr.Mechanic, SI.Gr. EED	VIIIth Std
99.	Mr. N.K Mohammed Sali	Sr. Mechanic, EED	SSLC, NTC Trade Electrician, Diploma in EE
100.	Mr. K. A Somanathan	Sr. Mechanic, EED	SSLC, NTC Trade Electrician, Diploma in EE
101.	Mr. Sasesh A.R	Sr. Mechanic, EED	SSLC, NTC Trade Electrician, Diploma in EE
102.	Mr. Nanda Kumar K	Sr. Mechanic, EED	JTSLC, NTC Electrician , B.com, Diploma in EE , Part time course in Data Entry and console operation
103.	Mr. Suresh Kumar. G	Sr.Mechanic, SI.Gr. ECD	SSLC, NTC Trade Mechanic General Electronics
104.	Mr. V. Krishnan Kutty	Sr. Mechanic, ECD	JTSLC, Trade Certificate Mechanic General Electronics
105.	Mr. Anandan K.R	Sr. Mechanic, ECD	SSLC, NTC-Mechanic Radio & Television, NAC Trade Electronic Mechanic
106.	Mr. Abdul Sathar V.M	Sr. Mechanic, CSE	Pre Degree, NTC Data preparation and Computer Software, Diploma IT
107.	Mr. Narayana Lal M	Sr. Mechanic, AED	SSLC, ITI Electronics 1 year Diploma
108.	Mr. Beljith P	Sr. Mechanic Bio-Mechanics	Pre Degree, Typewriting English Lower & Higher, B.Sc. Maths, Business Professional Programmer
109.	Mr. Rameshan N	Driver	SSLC(Failed), Driving Licence (Heavy)
110.	Mr. T. Rajendran Pillai	Sr.Mechanic, CED	SSLC(Failed) , Army Trade Brick layer Construction (Ex-Military)
111.	Mr. Noushad K.K	Sr.Mechanic, CED	Diploma in Computer Engg., NTC Data Preparation & Computer Software, Typewriting English (lower), Business professional programmer O' Level
112.	Mr. Ajaya Kumar. R	Sr.Mechanic, CED	SSLC, NTC-D'man Civil
113.	Mr. Jayan V.S	Sr.Mechanic, EED	SSLC, NTC Electrician, Electrical wireman license
114.	Mr. Praveen H Babu	Mechanic, ECD	SSLC, NTC Electronic Mechanic, Typewriting English (Lower), Job Training course in Advanced Electronics
115.	Ms. Sreeja .V	Mechanic, COE	Diploma in Computer Engg. – O' level, M.Sc
116.	Mr. Biju Francis	Mechanic, COE	PDC, Data Preparation & Computer Software (NTC) Typewriting English Lower, Word Processing and Data Entry Techniques
117.	Mr. Raju K P	Sr. Mechanic, EMU	SSLC, NTC Electrician, Wireman
118.	Mr.Santhosh Kumar MV	Mechanic, EMU	SSLC, Electrician NTC
119.	Mr. Mahesan K A	Mechanic, EMU	SSLC, Electrician NTC, Diploma in EE
120.	Mr. Sudheer P R	Mechanic EU	SSLC, NTC-Plumber
121.	Mr. Jayesh Kumar P	Mechanic EU	PDC, NTC- Plumber

122.	Mr. T K Sadanandan	Sr. Mechanic EU	SSLC failed, NTC-Plumber
123.	Mr. P Divakaran	Sr. Mechanic, (Sl.Gr.) EU	SSLC, NTC-Plumber
124.	Mr. K Alavikutty	Sr. Mechanic EU	SSLC failed, NTC-Plumber
125.	Mr. Mathew Varghese	Sr. Mechanic EU	PDC, NTC-Plumber
126.	Mr. Abdul Sidheek P K	Sr. Mechanic EU	SSLC, NTC-Plumber
127.	Mr. Sathyan P K	Sr. Mechanic EU	SSLC, NTC-Plumber
128.	Mr. A M Mathew	Sr. Mechanic, (Sl.Gr.) EU	SSLC, NTC-Plumber
129.	Mr. C Sreenivasan	Sr.Mechanic, Sl.Gr. EMU	SSLC, Wireman Exam
130.	Mr. C R Climson	Sr. Mechanic EMU	SSLC, NTC-Electrician Trade, Type writing (E) Lower, Wireman Licence
131.	Mr. M K Radhakrishnan	Sr. Mechanic EMU	SSLC, NTC Electrician Trade
132.	Mr. C V Abraham	Lab Assistant (Hr. Gr)	PDC, Certified Course in Computer Programme
133.	Mr. Prakash Peter	Lab Assistant	B.Sc(Chemistry) , CCCA M.Sc(Applied Psychology)
134.	Ms. A. Sumathi	Peon	Ist Std
135.	Mr. P. Apputty	Peon	SSLC Failed
136.	Mr. C. Gopalan	Peon	Vth Std.
137.	Ms. T.P. Ravia	Peon	Vth Std.
138.	Mr. B. Mohanan Nair	Peon	IIIth Std.
139.	Mr. K.V.Chandu	Peon	IVth Std
140.	Ms. Sangeetha P.K.	Peon	SSLC Failed
141.	Ms. Sarojini P.	Peon	VIIth Std.
142.	Ms. Savithri.C	Peon	VIIIth Std
143.	Ms. Freeda S. Balan	Peon	SSLC Failed
144.	Mr. M. Rajan	Watchman	SSLC Failed
145.	Mr. K. Abdul Hameed	Watchman	VIIth Std.
146.	Mr. P. Aravindan	Watchman	VIIIth Std.
147.	Mr. N.K. Ummerkutty	Watchman	VIIth Std.
148.	Sr. M. Sivaraman	Watchman	VIIth Std.
149.	Mr. V.P. Sadanandan	Gardener	Vth Std.
150.	Mr. P.K. Koran	Watchman cum Gardener	VIth Std.
151.	Mr. T. Janardhanan	Watchman cum Gardener	SSLC Passed
152.	Mr. Sadanandan M.M.	Watchman cum Gardener	SSLC
153.	Mr. Mamukoya M.	Watchman cum Gardener	VIIth Std.
154.	Mr. Abdul Razak P.	Watchman cum Gardener	VIIIth Std.
155.	Mr. C. Preman	Watchman cum Gardener	SSLC Failed
156.	Mr. T. Narayanan	Watchman cum Gardener	VIIIth Std.
157.	Mr. M.K. Rajan	Watchman cum Gardener	SSLC
158.	Mr. P V. Bhagyanathan	Watchman cum Gardener	SSLC Passed
159.	Mr. Vinod K.P.	Watchman cum Gardener	IXth Std. Not completed
160.	Mr. Revi V.	Watchman cum Gardener	IVth Std.
161.	Mr. K. Bhaskaran	Watchman cum Gardener	SSLC
162.	Mr. K.T. Balakrishnan	Watchman cum Gardener	SSLC Failed
163.	Ms. V. Pushpavally	Sanitation Worker	VIth Std.
164.	Ms. K. Thankamani	Sanitation Worker	IVth Std.
165.	Ms. Freeda S. Balan	Peon	SSLC Failed
166.	Ms. O. Chandramathi	Sanitation Worker	IV Std.
167.	Ms. V.P. Thankam	Sanitation Worker	VIIIth Std.

168.	Ms. I. Siamala	Sanitation Worker	SSLC Failed
169.	Ms. K.K. Santha	Sanitation Worker	SSLC Failed
170.	Ms. K.P. Devi	Sanitation Worker	VIIIth Std.
171.	Ms. Devi Poolakkal	Sanitation Worker	SSLC Failed
172.	Ms. E. Visalakshi	Sanitation Worker	SSLC Failed
173.	Ms. Saroja T.M	Sanitation Worker	SSLC Failed
174.	Ms. Sasikala L.	Sweeper cum Sanitation Worker	SSLC Failed
175.	Ms. C.Geetha	Sweeper cum Sanitation Worker	SSLC
176.	Ms. C Thanka	Sweeper cum Sanitation Worker	SSLC Failed
177.	Ms. Jameela A.K.	Sweeper cum Sanitation Worker	SSLC Failed
178.	Mr. K Parameswaran	Bearer cum Roomboy	SSLC Failed
179.	Mr. P. Abdurahiman	Bearer cum Roomboy	SSLC Failed
180.	Mr. Unnikrishnan C.	Vehicle Cleaner	SSLC Failed

3.3 TRAINING STATUS

59 members of the faculty were sponsored to participate in various International/national Conferences, Seminars and Workshops during the year under reporting. The department- wise breakup is given below.

Department of Architecture	: 1
Department of Chemical Engineering	: 6
Department of Chemistry	: 1
Department of Computer Science and Engineering	: 0
Department of Electronics & Communication Engineering	: 2
Department of Electrical Engineering	: 2
Department of Mathematics	: 4
Department of Mechanical Engineering	: 38
Department of Physical Education	: 1
School of Management Studies	: 2
School of Nano Science & Technology	: 2

3.4 PLACEMENT OF STAFF FOR ACADEMIC EXCELLENCE DEPARTMENT OF ELECTRONICS & COMMUNICATION ENGINEERING

Sl. No.	Name	Academic Excellence
1	Jaikumar M.G.	Pursuing Ph. D under QIP at IIT Madras
2	Sudhish N. George	Pursuing Ph. D (Part Time) at NIT Calicut
3	Suja K. J.	Pursuing Ph. D (Part Time) at NIT Calicut
4	Bindiya T. S.	Pursuing Ph. D (Part Time) at NIT Calicut
5	Dhanaraj K. J.	Pursuing Ph. D under QIP Scheme at IIT Delhi
6	V. Sakthivel	Pursuing Ph. D (Part Time) at NIT Calicut
7	Jayakumar E. P.	Pursuing Ph. D (Part Time) at NIT Calicut
8	Ameer P. M.	Pursuing Ph. D (Part Time) at NIT Calicut
9	Raghu C.V.	Pursuing Ph. D under QIP Scheme at IISc
10	Bhuvan B.	Pursuing Ph. D under QIP Scheme at IIT Delhi

DEPARTMENT OF CHEMICAL ENGINEERING

Sl.No	Name	Academic Excellence
1.	Smt.S.Bhuvaneshwari	Pursuing Ph.D (Part Time) at NIT Calicut
2.	Mr.Vineesh Ravi	Pursuing Ph.D (Part Time) at NIT Calicut
3.	Mr.Haribabu	Pursuing Ph.D (Part Time) at NIT Calicut

4.0 TEACHING PROGRAMMES

4.1 Programmes Offered

DEPARTMENT OF ARCHITECTURE

- i) B.Arch.
- ii) Ph.D.

DEPARTMENT OF BIOTECHNOLOGY

- i) B.Tech. (Biotechnology)
- ii) Ph.D.(Biotechnology)

DEPARTMENT OF CHEMICAL ENGINEERING

- i) B.Tech. (Chemical Engineering)
- ii) Ph.D.

DEPARTMENT OF CHEMISTRY

- i) M.Sc. (Tech.) (Polymer Science & Technology)
- ii) M.Sc (Chemistry)
- iii) PhD (Organic, Inorganic, Physical, Polymer, Theoretical, Bio-organic and Bio-inorganic Chemistry)

DEPARTMENT OF CIVIL ENGINEERING

- i) B.Tech. (Civil Engineering)
- ii) M.Tech. (Structural Engineering)
- iii) M.Tech. (Traffic & Transportation Planning)
- iv) M.Tech. (Offshore Structures)
- v) M.Tech. (Environmental Geotechnology)
- vi) Ph.D.

DEPARTMENT OF COMPUTER SCIENCE & ENGINEERING

- i) B.Tech. (Computer Science & Engineering)
- ii) MCA
- iii) M.Tech. (Computer Science & Engineering)
- iv) M.Tech. Computer Science & Engineering (Information Security)
- v) Ph.D.

DEPARTMENT OF ELECTRICAL ENGINEERING

- i) B.Tech. (Electrical & Electronics Engineering)
- ii) M.Tech. (Instrumentation & Control Systems)
- iii) M.Tech. (Power Systems)
- iv) M.Tech. (Power Electronics)
- v) M.Tech. (Industrial Power & Automation)
- vi) Ph.D.

DEPARTMENT OF ELECTRONICS & COMMUNICATION ENGINEERING

- i) B.Tech. (Electronics & Communication Engineering)
- ii) M.Tech. (Electronics Design & Technology)
- iii) M.Tech. (Microelectronics & VLSI Design)
- iv) M.Tech. (Telecommunication)
- v) M.Tech. (Signal Processing)
- vi) Ph.D.

DEPARTMENT OF MATHEMATICS

- i) M.Sc. (Tech.) (Mathematics and Scientific Computing)
- ii) M.Sc (Mathematics)
- iii) Ph.D

DEPARTMENT OF MECHANICAL ENGINEERING

- i) B.Tech. - Mechanical Engineering
- ii) B.Tech. - Production Engineering
- iii) M.Tech. - Industrial Engineering and Management
- iv)M.Tech. - Thermal Sciences
- v) M.Tech.- Manufacturing Technology
- vi) M. Tech. - Energy Engineering and Management
- vii) M.Tech. - Materials Science and Technology
- viii)Ph. D. Programme(All areas of Mechanical Engineering)

SCHOOL OF NANO SCIENCE AND TECHNOLOGY

- i) M.Tech. (Nanotechnology)
- ii) Ph.D.

DEPARTMENT OF PHYSICS

- i) B.Tech. (Engineering Physics)
- ii) M.Sc. (Tech.) (Photonics)
- iii) Msc Physics
- iv) Ph.D.

SCHOOL OF MANAGEMENT STUDIES

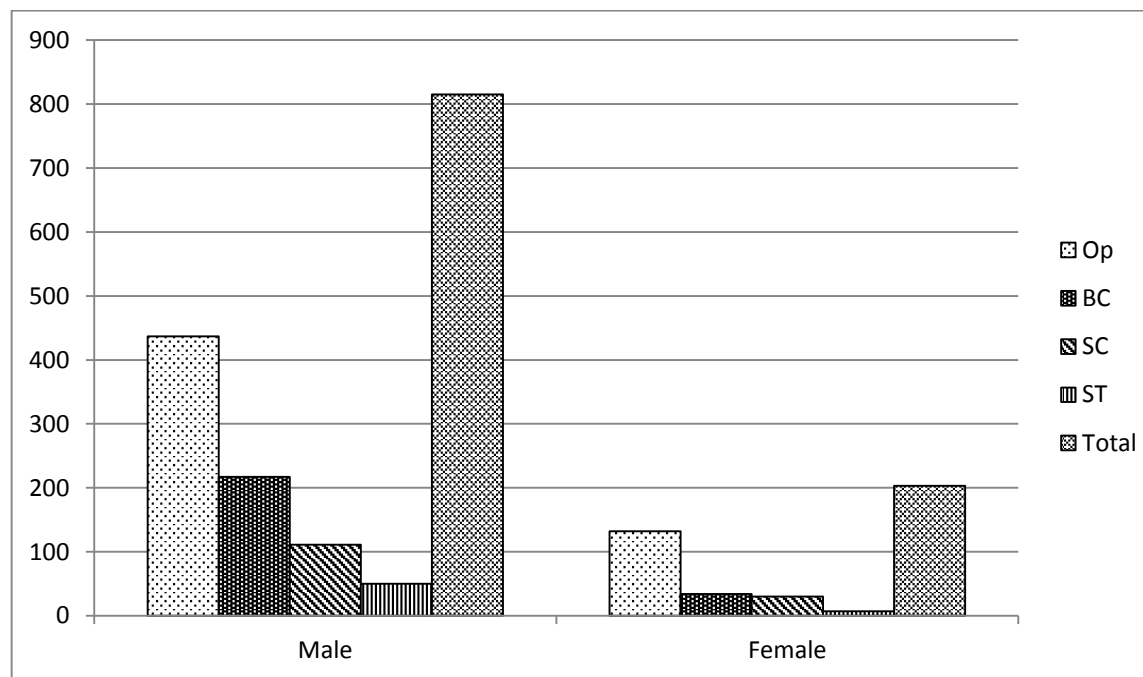
- i) MBA
- ii) Ph.D.

DEPARTMENT OF PHYSICAL EDUCATION

Class-room orientation of freshers and One-credit course in physical education (ZZ1093) including Olympic Values Education Programme, a course intended to inculcate values , character through sports and event-managerial abilities in students. The courses were included in institute time-table for all the first year students.

4.2 COURSE-WISE ENROLMENT WITH SEX, CASTE, BREAK UP 2012-2013

Level	Open		OBC		SC		ST		Total
	M	F	M	F	M	F	M	F	
B.Tech/B.Arch	437	132	217	34	111	30	50	7	1018
M.Tech	-	-	-	-	-	-	-	-	-
MCA	-	-	-	-	-	-	-	-	-
M.Sc (Tech.)	-	-	-	-	-	-	-	-	-
Ph.D.	-	-	-	-	-	-	-	-	-
Total	-	-	-	-	-	-	-	-	-



4.3. Admission Statistics-UG/PG Programmes, course-wise

4.3.1. 1st semester B.Tech/B.Arch Admission 2012-13

SPECIALISATION	OP	OP (PH)	OBC	OBC (PH)	SC	SC (PH)	ST	ST (PH)	DASA	FOREIGN	MEA (WELFARE)	TOTAL	MALE	FEMALE	TOTAL
Architecture	22	1	13	1	7	-	3	-	5	2	-	54	34	20	54
Bio Technology	14	-	7	-	5	-	1	-	3	-	-	30	18	12	30
Civil Engineering	68	2	37	-	20	1	9	-	13	1	-	151	121	30	151
Chemical Engineering	44	2	24	0	14	-	5	-	9	-	-	98	69	29	98
Computer Science and Engineering	69	2	36	1	21	-	7	-	13	-	-	149	115	34	149
Electrical and Electronics Engineering	68	2	37	-	19	1	10	-	13	-	1	151	111	40	151
Electronics and Communication Engineering	68	2	36	1	20	-	8	1	13	-	1	150	122	28	150
Engineering Physics	14	-	8	-	5	-	1	-	3	-	-	31	22	9	31
Mechanical Engineering	70	2	36	1	20	1	10	-	13	1	1	155	155	-	155
Production Engineering	21	1	11	2	7	-	2	-	5	-	-	49	48	1	49
Total	458	14	245	6	138	3	56	1	90	4	3	1018	815	203	1018

4.3.2. 1st Semester M.Tech. 2012-2013

DEPT	CODE	BRANCH	OP	OP-PH	OBC	OBC-PH	SC	SC-PH	ST	ST-PH	QIP	QIP(POLY)	DASA	SP	TOTAL	MALE	FEMALE	TOTAL
Civil	CE61	1.Structural Engineering	10	-	5	-	3	-	2	-	1	-	-	-	21	10	11	21
	CE62	2.Traffic & Transportation Engineering	10	-	4	-	3	-	1	-	-	-	-	-	18	8	10	18
	CE63	3.Offshore Structures	10	-	5	-	3	-	-	-	-	-	-	-	18	12	6	18
	CE64	4.Environmental Geotechnology	9	-	5	-	1	-	-	-	2	-	-	2	19	4	15	19
Computer	CS61	1.Computer Science & Engineering	10	-	5	-	2	1	1	-	1	-	-	1	21	19	2	21
	CS62	2.Computer Science&Engineering(Information security)	10	-	5	-	3	-	1	-	-	-	-	2	21	18	3	21
Electronics & Communication	EC61	1.Electronics Design&Technology	10	-	5	-	3	-	1	-	-	-	-	2	21	20	1	21
	EC62	2.Microelectronics & VLSI Design	10	1	6	-	2	-	1	-	1	-	-	1	22	20	2	22
	EC63	3.Telecommunication	6	-	3	-	2	-	1	-	1	-	-	1	14	6	8	14
	EC64	4.Signal Processing	6	-	4	-	2	-	1	-	1	-	-	2	16	11	5	16
Electrical	EE61	1.Instrumentation & Control Systems	10	1	5	-	2	-	2	-	1	-	-	5	26	10	16	26
	EE62	2.Power Systems	9	-	5	-	3	-	2	-	1	-	-	5	25	17	8	25
	EE63	3.Power Electronics	8	1	6	-	3	-	1	-	-	-	-	1	20	17	3	20
	EE64	4.Industrial Power & Automation	10	1	5	-	3	-	1	-	1	-	-	2	23	18	5	23
Mechanical	ME61	1.Industrial Engineering& Management	9	-	5	-	3	-	-	-	-	-	-	-	17	13	4	17
	ME62	2.Thermal Science	9	-	5	1	3	-	-	-	-	-	-	-	18	17	1	18
	ME63	3.Manufacturing Technology	9	-	6	-	2	-	-	-	-	-	-	1	18	18	0	18
	ME64	4.Energy Management	9	-	5	-	3	-	-	-	1	-	-	1	19	19	0	19
	ME65	5.Material Science&Technology	8	-	5	-	3	-	-	-	-	-	-	1	17	17	0	17
Nano Science & Technology	NS61	Nanotechnology	7	-	3	-	-	-	-	-	-	-	-	10	8	2	10	

4.3.3. M.Sc. (Tech.), MCA & Ph.D. 2012-2013

Department	Course	OPEN	OPEN-PH	OBC	OBC-PH	SC	SC-PH	ST	ST-PH	QIP	QIP(Poly)	DASA	SP	Total	Male	Female	Total
Mathematics (MA62)	M.Sc.(Tech.)	9	-	6	-	2	-	-	-	-	-	-	-	17	-	17	17
Physics (PH62)		6	-	3	-	2	-	-	-	-	-	-	-	11	6	5	11
Chemistry (CY62)		7	-	3	-	2	-	-	-	-	-	-	-	12	-	12	12
Computer	MCA	23	-	12	1	7	-	3	-	-	-	-	-	46	36	10	46
Architecture	Ph.D.	-	-	1	-	-	-	-	-	-	-	-	-	1	-	1	1
Biotechnology		5	-	2	-	-	-	-	-	-	-	-	-	7	4	3	7
Chemical		4	-	2	-	-	-	-	-	-	-	-	-	6	3	3	6
Civil		7	-	3	-	-	-	-	-	-	1	-	-	11	6	5	11
Computer Science		5	-	2	-	-	-	-	-	-	-	-	-	7	1	6	7
Chemistry		6	-	5	-	-	-	-	-	-	-	-	-	11	5	6	11
Electronics		8	-	-	-	1	-	-	-	-	1	-	-	10	4	6	10
Electrical		6	-	3	-	1	-	-	-	-	3	1	-	14	9	5	14
Mathematics		2	-	8	-	-	-	-	-	-	-	-	-	10	6	4	10
Mechanical		11	-	4	-	-	-	-	-	-	3	-	-	18	17	1	18
Nano Science &Tech.		2	-	1	-	-	-	-	-	-	-	-	-	3	3	-	3
Physics		7	-	3	-	-	-	-	-	-	-	-	-	10	5	5	10
School of Management Studies		4	-	2	-	-	-	-	-	-	-	-	-	6	3	3	6
Total			112	0	60	1	15	0	3	0	8	1	0	0	200	108	92

4.4. Student's Total Strength 2012-13

4.4.1. B.Tech. /B.Arch.

S.No	Branch	AIEEE																DASA		FN		MEA		Total		Grand Total
		OPEN		OP-PH		OBC		OB-PH		SC		SC-PH		ST		ST-PH		M	F	M	F	M	F	M	F	
		M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	
1	Architecture	15	7	0	1	10	3	1	0	5	2	0	0	3	0	0	0	0	5	0	2	0	0	34	20	54
2	Bio Technology	7	7	0	0	5	2	0	0	4	1	0	0	1	0	0	0	1	2	0	0	0	0	18	12	30
3	Chemical Engineering & Technology	29	15	2	0	20	4	0	0	8	6	0	0	5	0	0	0	5	4	0	0	0	0	69	29	98
4	Civil Engineering	50	18	1	1	35	2	0	0	18	2	1	0	9	0	0	0	6	7	1	0	0	0	121	30	151
5	Computer Science & Engineering	57	12	2	0	29	7	1	0	14	7	0	0	5	2	0	0	7	6	0	0	0	0	115	34	149
6	Electronics & Communication Engineering	55	13	2	0	32	4	1	0	17	3	0	0	7	1	1	0	7	6	0	0	0	1	122	28	150
7	Electrical & Electronics Engineering	52	16	2	0	27	10	0	0	12	7	1	0	6	4	0	0	10	3	0	0	1	0	111	40	151
8	Engineering Physics	12	2	0	0	6	2	0	0	3	2	0	0	1	0	0	0	0	3	0	0	0	0	22	9	31
9	Mechanical Engineering	70	0	2	0	36	0	1	0	20	0	1	0	10	0	0	0	13	0	1	0	1	0	155	0	155
10	Production Engineering	21	0	1	0	11	0	2	0	7	0	0	0	2	0	0	0	4	1	0	0	0	0	48	1	49
	Total	368	90	12	2	211	34	6	0	108	30	3	0	49	7	1	0	53	37	2	2	2	1	815	203	1018

4.4.2. 1st Semester M.Tech

Sl.No	BRANCH	OPEN		OP-PC		OBC		OB-PC		SC		ST		QIP		QIP(POLY)		NRI		SP		TOTAL	
		M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F
1	CE61	3	7	0	0	5	0	0	0	0	3	2	0	0	1	0	0	0	0	0	0	10	11
2	CE62	5	5	0	0	0	4	0	0	2	1	1	0	0	0	0	0	0	0	0	0	8	10
3	CE63	5	5	0	0	4	1	0	0	2	1	0	0	0	0	0	0	0	0	0	0	12	6
4	CE64	0	9	0	0	2	3	0	0	1	0	0	0	1	1	0	0	0	0	0	2	4	15

1	CS61	8	2	0	0	5	0	0	0	3	0	1	0	1	0	0	0	0	0	1	0	19	2
2	CS62	10	0	0	0	5	0	0	0	2	1	0	1	0	0	0	0	0	0	1	1	18	3

1	EC61	10	0	0	0	5	0	0	0	3	0	1	0	0	0	0	0	0	0	1	1	20	1
2	EC62	8	2	1	0	6	0	0	0	2	0	1	0	1	0	0	0	0	0	1	0	20	2
3	EC63	3	3	0	0	2	1	0	0	0	2	1	0	0	1	0	0	0	0	0	1	6	8
4	EC64	2	4	0	0	4	0	0	0	2	0	1	0	1	0	0	0	0	0	1	1	11	5

1	EE61	3	7	1	0	2	3	0	0	1	1	2	0	0	1	0	0	0	0	1	4	10	16
2	EE62	6	3	0	0	5	0	0	0	3	0	2	0	0	1	0	0	0	0	1	4	17	8
3	EE63	7	1	1	0	6	0	0	0	3	0	0	1	0	0	0	0	0	0	0	1	17	3
4	EE64	8	2	1	0	4	1	0	0	3	0	1	0	1	0	0	0	0	0	0	2	18	5

1	ME61	6	3	0	0	5	0	0	0	2	1	0	0	0	0	0	0	0	0	0	0	13	4
2	ME62	8	1	0	0	4	0	1	0	3	0	0	0	0	0	0	0	0	0	0	0	17	1
3	ME63	9	0	0	0	6	0	0	0	2	0	0	0	0	0	0	0	0	0	1	0	18	0
4	ME64	9	0	0	0	5	0	0	0	3	0	0	0	1	0	0	0	0	0	1	0	19	0
5	ME65	8	0	0	0	5	0	0	0	3	0	0	0	0	0	0	0	0	0	1	0	17	0

1	NS61	5	2	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	8	2
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4.4.3. M.TECH., M.Sc. & Ph.D.

BRANCH	SC			ST			OPEN			OPEN-PC			OBC			OBC-PC			TOTAL		
	M	F	T	M	F	T	M	F	T	M	F	T	M	F	T	M	F	T	M	F	T
CED	5	5	10	3	0	3	14	25	39	0	0	0	11	8	19	0	0	0	33	38	71
CSD	4	1	5	1	1	2	18	2	20	0	0	0	10	0	10	0	0	0	33	4	37
ECD	7	2	9	4	0	4	23	9	32	1	0	1	17	1	18	0	0	0	52	12	64
EED	10	1	11	5	1	6	24	13	37	3	0	3	17	4	21	0	0	0	59	19	78
MED	13	1	14	0	0	0	410	4	44	0	0	0	26	0	26	1	0	1	79	5	84
NST	0	0	0	0	0	0	5	2	7	0	0	0	3	0	3	0	0	0	8	2	10
TOTAL	39	10	49	13	2	15	494	55	179	4	0	4	84	13	94	1	0	1	264	80	344
MCA	6	1	7	2	1	3	18	5	23	0	0	0	9	3	12	1	0	1	36	10	46
M.Sc	1	5	6	0	0	0	4	18	22	0	0	0	1	11	12	0	0	0	6	34	40
Ph.D	1	1	2	0	0	0	39	32	71	0	0	0	22	17	39	0	0	0	62	50	112

4.4.4 Total number of Students of all semesters and all courses as on 31.03.2013

Programme	2012-2013	2011-2012	2010-2011	2009-2010	2008-2009
	Admission	Admission	Admission	Admission	Admission
B. Tech	947	915	901	811	Left
B. Arch	48	45	45	41	33
M. Tech	384	380	Left	Left	Left
M.C.A	46	41	45	Left	Left
M. Sc(Tech)	Nil	32	29	Left	Left
M. Sc	38	Nil	Nil	Nil	Nil
MBA	25	26	Left	Left	Left
Ph.D.	114	106	85	72	30
Total	1602	1545	1105	924	63
Total strength in campus as on 31.03.2013:					5239

4.5 THE HOSTELS

Accommodation

There are nine hostels and Apartments for the boys and one hostel with four blocks and Apartments for the ladies. One International Hostel with twenty three semi-furnished rooms is also available. The details of current students' accommodation are given below.

	Men	Women
Sanctioned accommodation in the hostels	2270	470
Number of inmates in the Hostels (as on 31.03.2012)	3557	724

The hostel buildings are maintained by the Institute. Day to day matters of administration and management of the Hostels is vested with the Hostel & Mess Committee consisting of the student representatives and the nominated faculty members who will be the Wardens. Stewards/Matrons are the caretakers of the hostel. Administration is overseen by the council of Wardens headed by the Chief Warden. Hostel Office is headed by the Hostel Manager, and he is assisted by office staff. Hostel Messes are managed by the Hostel & Mess Committee. The work is outsourced wherever necessary. There is a proposal for constructing a 1000 seated Boy's Hostel and 500 seated Ladies Hostel and the work in that direction are in progress.

Chief Warden: Dr. Allesu .K

Wardens:

1. Dr. Zacharia Varghese, CED
2. Dr. G. Unnikrishnan, Chemistry Dept.
3. Dr. Sameer S.M, ECED
4. Dr. Kodi Rangaswami, CED
5. Dr. Rajanikant G.K, Bio Tech.
6. Dr. Sunil Jacob John, Maths
7. Dr. Mahesh Kumar, Maths
8. Mr. Vineesh Ravi, Chemical Engg Dept.
9. Dr. Vari Sivaji Reddy, Physics Dept.
10. Dr. T. Jagadeesh, MED
11. Mr. S. Kumaravel, EED
12. Sri. Srinivasa T.M, CSED
13. Dr. Narayanan M.D, MED
14. Sri. V. Sakthivel, ECED
15. Dr. M. J. Jacob, Maths Dept
16. Dr. Sunil Mathew, Maths
17. Smt. Reesha Bharath .K, CED
18. Dr. Shaija A, MED
19. Dr. Chithra A.V, Maths
20. Ms. Pournami P.N, CSED
21. Dr. Madhavanunni, Physics Dept.

Hostel Manager (Officiating): Mr. Balan .A

Stewards:

1. Mr. Purushothaman .P
2. Mr. Ramachandran C.K
3. Mr. Sathyanandan P
4. Mr. Narayanankutty .P
5. Mr. Anwar Sadath

Matron: Ms. Vijayakumari P.P

4.6 SCHOLARSHIPS/ ASSISTANTSHIPS

Financial Assistance to M.Tech Students:

Teaching Assistantship/Research Assistantship/Scholarships are awarded to eligible M.Tech. Students as per rules formulated by the Govt. of India and the Institute for such awards from time to time, subject to availability of funds. Currently an amount of Rs.8,000/- per month for 22 months will be given to candidates admitted through GATE score. This facility will not be available to Sponsored candidates, foreign nationals and dependants of NRIs.

Financial Assistance to Research Scholars:

Teaching Assistantship/Research Assistantship/Scholarships are awarded to eligible full time research scholars as per the rules formulated by the Institute for such awards from time to time. Currently the scholarships are at the rate of Rs.18, 000/- per month for engineering departments and Rs.16,000/- per month for other departments. This facility will not be available to UGC/CSIR Fellowship/National Doctoral Fellowship Holders, sponsored candidates, foreign nationals and dependants of NRIs

4.7 GAMES AND SPORTS

Activities Conducted during 2012-13

Academic activities commenced with the class room sessions for all 14 batches of first year students as part of one-credit course ZZ1093. However the practical lessons on playfields were not fully possible due to excessive rains and non-readiness of infrastructure. Talent spotting could be completed during 2nd semester only. NITC teams 2011-12 in all games were selected by January 2013. Teams were soon trained and sent out to participate in National level Inter NIT tournaments at various NITs of the country.

In-Campus Mass Participation Activities were conducted on a satisfactory note. Nano-cricket, Willow cup cricket, FORZ Soccer were the leading activities. These activities attracted hundreds of students and exhibited the managerial prowess of student-organisers.

As usual, **the Intramural interclass competition** was held for both boys and girls. Participation was total and the organization was by **OVEP** students.

Kozikode District League championship is one tournament we frequent every year. Participation was complete in events like Foot ball, Cricket, Basket ball, Badminton, Volley ball, Hockey, Table tennis and Tennis.

4.8. AWARDS

DEPARTMENT OF CIVIL ENGINEERING

- Dr.S.Mathava Kumar: DST Fast track funding under young scientist scheme (Rs. 21,80,000 /-)

DEPARTMENT OF COMPUTER SCIENCE &ENGINEERING

Sl. No.	Name	Award
1	Three BTech CSE final year students- Karthik Singhal, Nithin V Nath and Jerrin Shaji George	first prize in SCTF 2012, a National Level "Capture the Flag" style ethical hacking contest held between August 16 to 19 at the Kollam campus of Amrita University .
2	Mr. Ayush Jaiswal	Viterbi-India Program Award from University of Southern California
3	Mr. Tijo Jose , M.Tech (CSE)	International placement offer from Google Inc with an annual salary of US \$ 1,30,000 (Rs.70 Lakhs per year)

DEPARTMENT OF MECHANICAL ENGINEERING

Sl. No.	Name	Award
1	Dr. Jose Mathew	ISTE- Certificate of Achievement 2012 National award (First Prize) for having guided the Best M.Tech thesis. Awarded in December 2012 at Hyderabad
2	Dr. Jose Mathew	Received International Travel Support Scheme award from DST for attending ASME International Conference at Chicago, USA during November 2012
3	Dr. T.J.S. Jothi	Young Engineer Award 2012-2013 Awarded by Institution of Engineers, India (IEI) Young Engineers Award in Mechanical Engineering Discipline.
4	Dr. T.J.S. Jothi	Visiting fellowship to IITM during May –July 2012 Awarded by Indian National Science Academy, INSA.

DEPARTMENT OF ELECTRONICS & COMMUNICATION ENGINEERING

Sl. No	Name	Award
1	Praveen Sankaran	Best paper award at Students' Conference on Engineering and Systems (SCES 2012).

PHYSICAL EDUCATION SECTION

Sl. No	Name of the team	Award/ Laurel won
1.	Inter NIT Basket ball for Girls at NIT Jaipur	Fourth
2.	Inter NIT Athletic meet at NITK Surathkal –boys & girls	Overall champs
3.	Inter NIT Volley ball at NIT Nagour - boys	Runner up
4.	Inter NIT cricket at NIT Nagpur – Cricket boys	Runner up
5.	Kozhikode District Cricket League tournament at Calicut	Champions

4.9 EXAMINATION DETAILS

B. Tech. /B. Arch. Result

Pgm. Code	Total Registered	1 st class with Distinction	1 st Class	2 nd Class	TotalPass	Percentage
CE	108	27	58	14	99	91.67
CS	115	31	59	21	111	96.52
EC	114	35	53	20	108	94.74
EE	101	34	56	06	96	95.05
ME	114	34	62	10	106	92.98
PE	34	05	22	04	31	91.18
BT	14	09	05	-	14	100
CH	67	17	36	08	61	91.04
TOTAL	667	192	351	83	626	93.85
AR	36	03	19	08	30	83.33

Details of M.Tech, MCA & Ph.D. Students passed out

Pgm. Code	Total Registered	1 st class with Distinction	1 st Class	2 nd Class	TotalPass	Percentage
CE61	18	11	05	02	18	100
CE62	17	15	02	-	17	100
CE63	17	09	07	-	16	94.12
CE64	17	15	02	-	17	100
CS61	26	14	12	-	26	100
CS62	20	13	07	-	20	100
EE61	22	10	11	-	21	95.45
EE62	27	12	15	-	27	100
EE63	22	11	10	01	22	100
EE64	22	12	10	-	22	100
EC61	24	10	13	-	23	95.83
EC62	25	10	14	01	25	100
EC63	14	07	05	01	13	92.86
EC64	15	09	04	-	13	86.67
ME61	08	05	03	-	08	100
ME62	16	09	07	-	16	100
ME63	17	08	09	-	17	100
ME64	09	06	03	-	09	100
ME65	05	02	03	-	05	100
NS61	07	05	01	-	06	85.71
TOTAL M.Tech	348	193	143	05	341	97.99

MA61	14	02	06	06	14	100
CY61	11	02	09	-	11	100
PH61	8	05	03	-	08	100
TOTAL M.Sc Tech	33	09	18	06	33	100
MBA	20	19	01	-	20	100
MCA	36	14	18	04	36	100
Ph.D	13	-	-	-	13	100
TOTAL	450	235	180	15	443	98.44

4.10 TECHNOLOGY BUSINESS INCUBATOR (TBI)

National Institute of Technology Calicut has set up a Technology Business Incubator (TBI-NITC) in 2003-04 with the support of National Science & Technology Entrepreneurship Development Board (NSTEDB) Department of Science and Technology, Govt. of India to incubate startup industries in IT and Electronics. TBI is registered as a society under the society's registration Act XXI of 1860 on 16 Sep 2009. The following table shows what TBI is so far:

1	Total number of units in Technology Business Incubator	14
2	Number of units joined during 2012 - 2013	5
3	Number of units graduated from TBI during 2012 - 2013	4
4	Number of units preparing to graduate	3
5	Total number of units so far assisted by TBI	36
6	Total number of employees in the incubated companies	600

Programmes Conducted by TBI

- Faculty Development Programme on Entrepreneurship conducted during 26 Nov 2012 to 07 Dec 2012.
- Entrepreneurship Development Programme conducted during 02 Jan 2013 to 30 Jan 2013.
- Women Entrepreneurship Development Programme conducted during 16 Jan 2013 to 13 Feb 2013
- Technical Entrepreneurship Development Programme (Rubber Based) conducted during 25 Feb 2013 to 30 Mar 2013.
- Technical Entrepreneurship Development Programme (Food Processing) conducted during 25 Feb 2013 to 30 Mar 2013

4.11 TECHNICAL EDUCATION QUALITY IMPROVEMENT PROGRAMME (TEQIP)

This Institute has been selected, through a national level selection, for funding under TEQIP-Phase II of Government of India Ministry of Human Resources Development. The total outlay under the TEQIP-II for this Institute is Rs.12.5 Crores, spread over a period of five years from 2010-11 to 2014-15. Institute has received the first installment of Rs.2.0 crores. The objective of the scheme has been mainly to scale up Post Graduate Education and the demand driven research. Faculty & Staff Development has also been an important component along with the strengthening of PG and research laboratories. Institute has provided research assistantships for some research scholars, and has prepared the guidelines for the support of travel for faculty within and outside India, to attend conferences and workshops. Arrangements for training, for both faculty and staff in various places/agencies, are also in the progress.

5.0 RESEARCH AND DEVELOPMENT ACTIVITIES

5.1 Ph.D PROGRAMMES-EXISTING AND PROPOSED

DEPARTMENT OF ARCHITECTURE

a. Ph. Ds completed under Existing Scheme:

Sl. No.	Name	Guide	Area of Specialization	Scheme (QIP/Part Time/Full time)
1	Mr. Dili A S	Dr. Naseer M A	Comfort Studies in Traditional Building	QIP

b. On-going Ph. Ds under the Existing Scheme:

Sl. No.	Name	Guide	Area of Specialization	Scheme (QIP/Part Time/Full time)
1.	Ar. Bimal.P, Architect Planner, Assiastant Professor, Dept. of Architecture, NIT Calicut	Dr.P.PAnilkumar	Landuse impacts and parametric characterization of Kerala's urban pattern –	Internal
2.	Ar. Chithra.K,Architect Planner, Assiastant Professor, Dept. of Architecture, NIT Calicut	Dr.P.PAnilkumar and Dr.Naseer.M.A	Landuse Impacts' analysis in a medium scale urban area -	Internal
3	Ar. Smitha G	Dr. Naseer M.A	Remote Sensing application in Urban Planning	Internal
4.	Ar. Muhammed Sharief,, M.Arch,Dean, School of Architetcure, Karpagam School of Architecture, Coimbatore	Dr.P.PAnilkumar and Dr.Naseer.M.A	Climatic comfort as applied in vernacular architecture	Part time
5.	Ar. Katiravan, M.Arch, Chief Architect, Venkitaramanan Associates, Coimbatore.	Dr.P.PAnilkumar and Dr.Arun	Norms for green buildings for the Indian context	Part time
6.	Ar. Pradeep.p, Engineer planner, Town planning Dept. of Kerala	Dr.P.P.Anilkumar	Built up space vs Infrastructure capacity assessment.	Part time
7.	Ar. Amrutha.K, Landscape Architect.	Dr.P.P.Anilkumar	Solid waste disposal through landscape development and maintenance –	Full time

8.	Ar. Josna Raphael	Dr. Kasthurba A K	Urban conservation	Part time
9	Ar. Anjana Bhagyanathan	Dr. Kasthurba A K	Conservation of landscapes and Ecology	Full time
10	Ar. V Rajina Rahiman	Dr. Naseer M A	Urban Transportation	Part time

c. Proposed Ph.D. programmes : Nil

DEPARTMENT OF CHEMICAL ENGINEERING

a. Ph. Ds completed under Existing Scheme: NIL

b. Ongoing Ph.Ds under existing scheme:

Sl. No.	Name	Guide	Area of Specialization	Scheme (QIP/Part Time/Full time)
1.	Smt.S.Bhuvanesh wari	Dr.V.Sivasubramanian	Biosorption of heavy metals	Part time
2.	Mr.Naveen Sankaran	Dr.V.Sivasubramanian	Modelling and Simulation of Industrial accidents	Converted to part time from Feb 2013
3.	Mr.Haribabu K	Dr.V.Sivasubramanian	Effluent Treatment in Inverse Fluidized bed reactor	Part time
4.	Mr.Karthik P	Dr.Shiny Joseph	Bioenergy	Full time
5.	Mr.Vineesh Ravi	Dr.Shiny Joseph	Microdirect methanol fuel cell modeling and simulation	Part time
6.	Ms. Najuma A	Dr.Lity Alen Varghese	Adhesives and surface coatings	Full time
7.	Mr. Anu	Dr.N. Selvaraju	Modeling and Simulation	Full time
8.	Mr. Hariharan	Dr.Shiny Joseph	Preparation and characterisation of activated carbon from biomass	Full time
9.	Mr. Rahul Antony	Dr.N. Selvaraju	Microfluidics: Modeling and control of microfluidic reaction	Full time
10.	Mr. R.Sivashankar	Dr.V.Sivasubramanian	Degradation of dye stuff using Immobilisation and nano particles	Full time
11.	Mrs. Uma Krishnakumar	Dr.V.Sivasubramanian	Optimization of Biodiesel production using solid metal oxide catalyst	Full time
12.	Mrs.A.B.Sathya	Dr.V.Sivasubramanian	Study of Biopolymer synthesis from agro waste using algal species and degradation	Full time
13.	Mrs.P.Sreedha	Dr.V.Sivasubramanian	Studies on treatment of waste water using fixed biofilm reactors.	Full time
14.	Mr.Vishnuganth	Dr.N. Selvaraju	Waste water Treatment	Full time
15.	Mr.N.Rangabhashi yam	Dr.N.Selvaraju	Biosorption of heavy metals	Full time
16.	Mrs.Dhanya	Dr.K.Aparna	Treatment of textile dye effluent by various methods	Full time
17.	Mr.Anish Mathew	Dr.MV.Pavan Kumar	Process control	Part time

c. Proposed Ph.D. programmes: NIL

DEPARTMENT OF CIVIL ENGINEERING

a. Ph.Ds completed under Existing Scheme: NIL

b. On-going Ph. D under existing scheme:

Sl. No.	Name	Guide	Area of specialization	Scheme (QIP/Part time/Full time)
1	V Vishnu	Dr. P Syamala	Water Resources Engineering	Part time
2	Madhu Raj P C	Dr. J Sudhakumar	Building Science Engineering	QIP
3	Savitha C	Dr. S Chandrakaran Dr T.M. Madhavan Pillai	Geotechnical Engg	Full time
4	P Srinivasa Nagu	Dr. N Sankar Dr. S Chandrakaran	Geotechnical Engg	QIP
5	Anil Kumar P.S	Dr. N Sankar Dr. S Chandrakaran	Geotechnical Engg	QIP
6	Hari G	Dr. N Sankar Dr. S Chandrakaran	Geotechnical Engg	Part Time
7	Gopan M	Dr. Santosh G Thampi	Environmental Engineering	Part time
8	Shamla Rasheed	Dr. K Sasikumar Dr P Syamala	Water Resources Engineering	Part time
9	Justine Jose	Dr. V Mustafa Dr. T P Somasundaran	Structural Engg	Full time
10	K Smitha	Dr. Santosh G Thampi	Water Resources Engineering	Full time
11	Sabeena M.V	Dr PV Indira Dr N Ganesan	Structural Engineering	Full Time
12	Sreela P K	Dr MVLR Anjaneyulu	Transportation Engineering	QIP
13	Sivakumar M	Dr MVLR Anjaneyulu	Transportation Engineering	Part time (internal)
14	Sabna V	Dr. Santosh G Thampi	Environmental Engineering	Full time
15	Chithra N.R	Dr. Santosh G Thampi	Water Resources Engineering	Part time (internal)
16	Anu V Thomas	Dr. J Sudhakumar	Building Science Engineering	QIP
17	Anjana Santhakumar	Dr. N Ganesan Dr. P V Indira	Structural Engg	QIP
18	Anjana S	Dr MVLR Anjaneyulu	Transportation Engineering	Full time
19	Aneesha Balaji	Dr. T M Madhavan Pillai Dr. Praveen Nagarajan	Structural Engg	Part time
20	Mary John C.	Dr. N Ganesan, Dr. P V Indira	Structural Engg	Part time
21	Manjula N.K.	Dr. Praveen Nagarajan Dr. T M Madhavan Pillai	Structural Engg	Full time
22	Yashida Nadir	Dr. Praveen Nagarajan Dr. Mohammed Ameen	Structural Engg	Full Time-QIP
23	Seena P.	Dr. N Ganesan Dr. P V Indira	Structural Engg	Full Time-QIP
24	Sri. Ragesh P.P.	Dr. V Mustafa	Offshore Structures	Full Time-QIP
25	Smt. Sreelekha M.G.	Dr MVLR Anjaneyulu	Transportation Engineering	Full Time-QIP
26	Sri.B.Venkata Subbaiah	Dr. V Mustafa Dr. Santhosh G Thampi	Offshore Structures	Full Time-QIP-Poly
27	Safeer ali Abbas Ali	Dr. Arun C	Building Science Engg.	Full Time
28	Mohammed Abdul Akbar	Dr. V Mustafa	Structural Engg.	Full Time

29	Binil Gopinath	Dr MVLR Anjaneyulu	Transportation Engineering	Full Time
30	Asha C. Raju	Dr. Mathava Kumar S	Environmental Engg.	Full Time
31	Lila P.C.	Dr MVLR Anjaneyulu	Transportation Engineering	Part Time
32	V.S.Sanjay Kumar	Dr. C Arun	Construction Management	Part Time
33	Bybin Paul	Dr MVLR Anjaneyulu	Transportation Engineering	Part Time
34	S. Rajendra Prasad	Dr. P V Indira Dr. N Ganesan	Structural Engg	Full Time
35	Nidhi M	Dr. P V Indira	Structural Engg	Full Time
36	Raghu Kumar C.	Dr. Vinu Palliserry Dr. T P Somasundaran	Structural Engg	Full Time
37	Wajeeh Mohamed T.P.	Dr. K Rangaswamy	Geotechnical Engg	Full Time
38	Beena B.R.	Dr. A P Shashikala	Structural Engg	Part Time
39	Shiji P.		Construction Management	Full Time
40	Bindu Sugunan	Dr. Santhosh G Thampi	Environmental Engg.	Part Time
41	Muneera C.P.	Dr. K Krishnamurthy	Transportation Engineering	Full Time
42	Saji K.P.	Dr. T M Madhavan Pillai Dr. Sajith A S	Structural Engg	Part Time
43	Abey E.Thomas	Dr. T P Somasundaran Dr. Sajith A S	Structural Engg	Full Time
44	Biju M.S.	Dr. Santhosh G Thampi	Environmental Engg.	Part Time
45	Anil Joseph	Dr. S Chandrakaran Dr. N Ganesan	Geotechnical Engg	Part Time
46	Ansu V	Dr MVLR Anjaneyulu	Transportation Engineering	QIP
47	Devika Babu	Dr MVLR Anjaneyulu	Transportation Engineering	Full Time
48	Harikumar M	Dr. S Chandrakaran Dr. N Sankar	Geotechnical Engg	Full Time
49	Greeshma Nizy Eujine	Dr. S Chandrakaran Dr. N Sankar	Geotechnical Engg	Full Time
50	Lamanto T. Somervell	Dr. Santhosh G Thampi	Hydraulics	Full Time
51	Subhodeep Jana	Dr. Vinu Palliserry	Bio Mechanics	Full Time
52	Prashob P S	Dr. T P Somasundaran	Offshore Structures	Full Time
53	Sahana Ranganatha	Dr. N Ganesan Dr. P V Indira	Structural Engg	Full Time
54	Sivakumar B	Dr. K Krishnamurthy	Transportation Engineering	Part Time
55	Sabitha N M	Dr. Santhosh G Thampi Dr. Sathish Kumar D	Hydraulics	Part Time

c. Proposed Ph.D. Programmes: NIL

DEPARTMENT OF COMPUTER SCIENCE & ENGINEERING

a. Ph. Ds completed under Existing Scheme:

Sl. No	Name	Guide	Area of specialisation	Scheme (QIP/PT/FT)
1	Mr. Sajeev G P	Dr. M P Sebastian/Dr.Murali Krishnan	Web Caching	PT
2	Mr. Abdul Haleem P P	Dr. M P Sebastian/Dr Madhu Kumar S D	Mobile Networks	FT

3	Ms. Anitha V S	Dr. M P Sebastian/Dr Madhu Kumar S D	Adhoc and Mobile Network	QIP
4	Mr.K Santle Camilus	Dr.V K Govindan	Image Processing	FT
5	Mr.A Shajin Nagarjun	Dr. M P Sebastian	Adhoc Network	PT
6	Mr.Gylson Thomas	Dr.V K Govindan	Image Processing	PT
7	Mr. Prasad S M	Dr. V K Govindan / Dr. P S Sathi devi	Image Processing	QIP
8	Ms. Jyothisha J. Nair	Dr. V K Govindan	Image Processing	FT

b. Ongoing Ph. Ds under the Existing Scheme:

Sl. No.	Name	Guide	Area of specialisation	Scheme (QIP/PT/FT)
1.	Mr. K R Chandrasekhara Pillai	Dr. M P Sebastian/ Dr. K Murali Krishnan	Network Security	PT
2.	Mr. Vinodu George	Dr. M P Sebastian// Dr. K Murali Krishnan	Security	PT
3.	Mr. Manu J Pillai	Dr. M P Sebastian	Mobile Networks	PT
4.	Mr. K.S.Valasaraj	Dr. Vineeth Paleri	Compilers	QIP
5.	Mr. Shyam P Joy	Dr. Priya Chandran	Information Security	PT
6.	Mr. Abdul Nazeer K A	Dr. M P Sebastian/ S D Madhu Kumar	Bioinformatics	PT
7.	Mr. Saidalavi Kalady	Dr. V K Govindan	Intelligent agents	PT
8.	Ms. Saleena N	Dr. Vineeth Paleri	Compilers	PT
9.	Ms. Anu Mary Chacko	Dr. M P Sebastian/ S D Madhu Kumar	Network Security	PT
10.	Ms. Rekha R.	Dr. Vineeth Paleri	Compilers	FT
11.	Ms. Pournami P.N.	Dr. V.K. Govindan	Image Processing	PT
12.	Mr. Vinith R	Dr. V.K. Govindan	Image Processing	FT
13.	Ms. Pamela Vinita Eric	Dr. K. Murali Krishnan	Algorithms	PT
14.	Mr. Jayaraj P B	Dr. K. Murali Krishnan	Operating Systems	PT
15.	Mr. Jereesh A S	Dr. V.K Govindan	Image Processing	FT
16.	Ms. Lijiya A	Dr. K. Murali Krishnan	Image Processing	PT
17.	Ms. Saniya A	Dr. S D Madhu Kumar	Cloud Computing	PT
18.	Mr. Jithin R	Dr. Priya Chandran	Information Security	FT
19.	Mr.Unnikrishnan P	Dr. V.K.Govindan	Pattern Recognition	FT
20.	Ms.Shabeera T P	DR. Madhukumar S.D.	Cloud Computing	FT
21.	Ranju Ann George	Dr.Sudeep K S	Algorithms & Graph Theory	FT
22.	Nishamol P H	Dr. G. Gopakumar	Bio Informatics	FT
23.	K Nagaraju	Dr.Sudeep K S	Algorithms & Graph Theory	FT
24.	Jeethu V Devasia	Dr. Priya Chandran	Algorithms	FT
25.	Sreejini K S	Dr. V.K.Govindan	Image Processing	FT
26.	Sameera Muhammed Salam	Dr. K Muralikrishnan	Graph Theory	FT
27.	Remya K Sasi	Dr. V.K Govindan	Image Processing	FT
28.	Nandini J Warriar	Dr. K Muralikrishnan	Graph Theory	FT
29.	Daphna Chacko	Dr. K Muralikrishnan	Graph Theory	FT
30.	Arun K S	Dr. V.K.Govindan	Image Processing	FT
31.	Anita Brijit Mathew	Dr. S D Madhu Kumar	Cloud Computing	FT

c. Proposed Ph.D. programmes: NIL

DEPARTMENT OF ELECTRICAL ENGINEERING

a. Ph. Ds completed under Exiting Scheme:

Sl. No	Name	Guide	Area of specialization	Scheme (QIP/Part Time/ Full Time)
1	Kumaravel S	Dr. Ashok S	Micro Grid Integration.	Part time
2	Ahamed Sayed	Dr. Paul K Joseph & Dr. Jeevamma Jacob	Heart rate variability.	Part time
3	Jagadanand G	Dr. Saly George & Dr. Jeevamma Jacob	Fault detection of Induction Motor.	Part time

b. Ongoing Ph. Ds under the Existing Scheme:

Sl. No	Name	Guide	Area of specialization	Scheme (QIP/Part Time/ Full Time)
1	A Dolly Mary	Dr. Abraham T Mathew	Control Systems	QIP
2	Sreekanth M	Dr. Abraham T Mathew	Control Systems	Full Time
3	Shyma Muhammed	Dr. Abraham T Mathew	Control Systems	Full Time
4	Mary Reena K E	Dr. Abraham T Mathew	Control Systems	QIP
5	Ajay Babu	Dr. Ashok S	Investigations on Plug-in Vehicles	Full time
6	Rajeev T	Dr. Ashok S	Cloud Computing Applications in DG	QIP
7	Vasanthi V	Dr. Ashok S	Power Quality issues.	QIP
8	Sujo George	Dr. Ashok S	Automation	Full Time
9	Maya G	Dr. Elizabeth P Cheriyan	Power Systems	Full Time
10	Parthish Kumar	Dr. Jeevamma Jacob	Control Systems	Part Time
11	M Pala Prasad Reddy	Dr. Jeevamma Jacob	Control Systems	Full Time
12	T Srinivas Sirish	Dr. K S Sivanandan	Control Systems	QIP
13	Shalu George	Dr. K S Sivanandan	Control Systems	QIP
14	Jinu K T	Dr. K S Sivanandan	Control Systems	Part Time
15	Ashmi M	Dr. K S Sivanandan	Control Systems	Full Time
16	Sujalakshmi V	Dr. K S Sivanandan & Dr. K M Moideenkutty	Control of self-balancing system	Part Time
17	Rehna Nalakath	Dr. M P Nandakumar.	Control Systems, Optimal Control	Full time
18	K Dheeraj	Dr. M P Nandakumar.	Control Systems, Optimal Control	Full time
19	T Ananthan	Dr. M.V. Vaidyan	Control Systems	Full Time
20	Shijoh V	Dr. M.V. Vaidyan	Control Systems	Full Time
21	Anirudh K M	Dr. Mukti Barai	Power Electronics	Full Time
22	Meenu D Nair	Dr. Mukti Barai	Power Electronics	Full time.
23	Vivek G	Dr. Mukti Barai	Power Electronics	Full time
24	Saritha M	Dr. Paul K Joseph & Dr. Abraham T Mathew	Biomedical image processing	Full time
25	Asha ND	Dr. Paul K Joseph	Cardiac signal processing	Full time
26	Jayachandran ES	Dr. Paul K Joseph	Biosignal processing	Full time
27	Reeda K	Dr. Paul K Joseph	Nerve conduction studies	Part time
28	Subha DP	Dr. Paul K Joseph	EEG analysis	Part time
29	Surya S Nair	Dr. Paul K Joseph	Biomedical Engineering	Full time
30	Thasneem Fathima N K	Dr. Paul K Joseph	Biomedical Engineering	Full time

31	O. Asokan	Dr. R Sreeram Kumar	Investigations on Voltage Instability Problems	Part Time
32	R Sunitha	Dr. R Sreeram Kumar & Dr. Abraham T Mathew	Power system security	Internal
33	Vinod Pottakulath	Dr. R Sreeram Kumar & Dr. Elizabeth P Cheriyan	Power Systems	Full Time
34	Ismayil	Dr. R Sreeram Kumar & Dr. Sindhu T K	Power Systems	QIP
35	K.G.Jolly	Dr. R. Sreeram Kumar & Dr. R. Vijaya Kumar	Intelligent Task Planning and Action selection in a Multi-agent Robot-Soccer System	Part-Time
36	Binu K Baby	Dr. Saly George	Power Electronics	Full Time
37	Nafeesa K	Dr. Saly George	Power Electronics	Full Time
38	Siny Paul	Dr. Sindhu T K	Nanocomposite Insulators	Part Time
39	Nisha P V	Dr. Sindhu T K & Dr. Elizabeth P Cheriyan	Electromagnetic interference	Part time
40	Sony Kurian	Dr. Sindhu T K & Dr. Elizabeth P Cheriyan	Power Systems	Full time
41	Devika KB	Dr. Susy Thomas	Control Systems	Full Time
42	Mija S.J	Dr. Susy Thomas	Dynamic Control System	Internal
43	Rinu Alice Koshy	Dr. Susy Thomas	Control Systems	Part time
44	Mini V	Dr. T. K. Sunil Kumar	Power Systems	QIP
45	Priya N	Dr. T. K. Sunil Kumar	Control Systems	Full Time
46	Shinghare D Y	Dr. T. K. Sunil Kumar	Power Systems	QIP(Poly)
47	Suresh P Damodaran	Dr. T. K. Sunil Kumar	Power Systems	QIP
48	Febina Beevi	Dr. Jeevamma Jacob	Control Systems	Full Time
49	Guguloth Ramesh	Dr. T. K. Sunil Kumar	Power Systems	Full Time
50	John George	Dr. T.L. Jose & Dr. Jeevamma Jacob	FACTS Controllers for Power Quality Improvement	Full Time
51	Joseph Peter	Dr.Rijil Ramchand	Constant switching frequency hysteresis controllers	Full Time
52	Biju K	Dr.Rijil Ramchand	Grid interfacing of renewable energy sources using multilevel inverters	Part Time

c. Proposed Ph.D. Programmes:

SI No.	Name	Guide	Area of specialization	Scheme (QIP/Part Time/ Full Time)
1	Abhilash T Vijayan	Dr. Ashok S	Process Automation	QIP
2	Jino M Pattery	Dr. Elizabeth P Cheriyan & Dr.Rijil Ramchand	Power Systems	Part Time
3	Sivaprasad	Dr. Kumaravel S & Dr. S Ashok	MicroGrid	Full Time
4	Nithin Raj	Dr. Saly George & Dr. Jagadanand.G	Power Electronics	Full Time
5	Deepthi S Nair	Dr. Saly George & Dr. Jagadanand.G	Power Electronics	Full Time
6	Rajashree Raghavan	Dr. Susy Thomas	Control Systems	QIP
7	Nikhil Binoy	Dr. Susy Thomas	Control Systems	Full Time
8	M J Laly	Dr. Susy Thomas	Control Systems	QIP
9	Pratheesh K J	Dr.Rijil Ramchand & Dr Jagadanand.G	Power Electronics	Full Time

DEPARTMENT OF ELECTRONICS & COMMUNICATION ENGINEERING

a. Ph. Ds completed under Existing Scheme :

Sl. No.	Name	Guide	Area of Specialization	Scheme (QIP/ PT/ FT)
1	Baijubai T. P.	Dr. Elizabeth Elias	Compressive Sampling	FT
2	Manju Manuel	Dr. Elizabeth Elias	Digital Filter Design	QIP
3	P. C. Neelakantan	Dr. A.V. Babu	Wireless Networks	FT

b. On-going Ph. Ds under the Existing Scheme:

Sl. No.	Name	Guide	Area of Specialization	Scheme (QIP/ PT/ FT)
1	Bindiya T. S.	Dr. Elizabeth Elias	Trans multiplexers	PT
2	Sakthivel V. S	Dr. Elizabeth Elias	Filter Banks	PT
3	Shaeen K.	Dr. Elizabeth Elias	Filter Banks	FT
4	James. T. G	Dr. Elizabeth Elias	Variable Bandwidth Digital Filters	PT
5	Nisha Haridas	Dr. Elizabeth Elias	Multirate Signal Processing	FT
6	Ameer P. M.	Dr. Lillykutty Jacob	Underwater Sensor Networks	PT
7	Harigovindan V. P.	Lillykutty Jacob & A. V. Babu	Vehicular Networks	FT
8	Cibil K.	Lillykutty Jacob & S. M. Sameer	MIMO-OFDM Communications	QIP
9	Anil K. Jacob	Lillykutty Jacob	Body Area Networks	FT
10	Jalaja M. J.	Lillykutty Jacob	Underwater Sensor Networks	QIP
11	Mary Reena	Lillykutty Jacob & Abraham T Mathew	Networked Control Systems	QIP
12	Shamna H. R.	Lillykutty Jacob	Cooperative Networks	QIP
13	Anzar S. M.	P. S. Sathidevi	Multi-Biometric	FT
14	Jayakumar E. P.	P. S. Sathidevi	VLSI Signal Processing	PT
15	Lalmohan K. S.	P. S. Sathidevi & Deepthi P. P.	Secure Communication	PT
16	Lekshmi M. S.	P. S. Sathidevi	Computational Auditory Scene Analysis	PT
17	Jeeva K. A.	P. S. Sathidevi & Deepthi P. P.	Signal Processing in Encrypted Domain	PT
18	Sreelatha G.	P. S. Sathidevi	Comet Assay Image Analysis	QIP
19	Meena V.	G. Abhilash	Compressive Sampling(Signal Processing)	PT
20	Gayatri Parthasarathy	G. Abhilash	Signal Processing	FT
21	Shahnaz K. V.	C. K. Ali	Wireless Communication	FT
22	Deepak P. M.	C. K. Ali	Wireless Communication	FT
23	K.S. Deepak	A.V. Babu	Wireless Networks	QIP
24	Sidharth Shelly	A.V. Babu	Wireless Networks	FT
25	K.S. Geethu	A.V. Babu	Underwater Acoustic Sensor Networks	FT
26	Suja K. J.	Rama Komaragiri	MEMS	PT
27	Ranjith R.	Rama Komaragiri	VLSI	FT
28	Thafasalijyas V. P.	Sameer S. M.	Wireless Communication	FT
29	Muneer P.	Sameer S. M.	Wireless Communication	FT

30	Namitha A. S.	Sameer S. M.	Wireless System Design	FT
31	Finto Raphael	Sameer S. M.	Multimedia Transmission over Wireless Networks	FT
32	Abhilash Antony	Sreelekha G.	Video Processing	FT
33	Arun Varghese	Sreelekha G.	Image Processing	QIP
34	Sudhish N. George	Deepthi P. P.	Multimedia Security	PT
35	Celine Mary Stuart	Deepthi P. P.	Secure Channel coding	QIP
36	Jilna P.	Deepthi P. P.	Design of low complex cryptographic primitives	FT
37	Hari C. V.	Praveen Sankaran	Pose Classification	FT
38	Rashmi M.	Praveen Sankaran	Manifold Embedding	FT
39	Deepa N.	Praveen Sankaran	Nonlinear Image-Processing	FT

c. Proposed Ph.D Programmes:NIL

DEPARTMENT OF MECHANICAL ENGINEERING

a. Ph. Ds completed under Existing Scheme:

Sl. No	Name of the student and Reg. No.	Thesis title	Guide	Year of completion	Scheme FT/PT/ QIP
1	Nadiya M (P090047MS)	Managing the operational self sustainability of Indian Microfinance Institutions – A Mixed Methods Inquiry	Dr. R. Radha Ramanan	September 2012	FT
2	Maheshkumar P.	Estimation of entropy generation and its minimization in heat pipes	C. Muraleedharan	2012	PT
3	Sreekanth K J P080015ME	Energy Management	Dr. S. Jayaraj and Dr. N. Sudarsan	2012	FT
4	Dinesh, K. K.Y3DP25	Analysis of thermophoretic flow through an isothermal vertical parallel plate channel	Dr. S. Jayaraj	2012	PT
5	K.R. Nambiar ME04P005	Laser assisted zone refining of metals: an investigative study of purification of silver using carbon dioxide laser as heat source	Dr. N. M. Nagarajan & Dr. M. A. Joseph	2012	PT
6	Somashekar, K. P. P060009ME	Theoretical and experimental investigations on micro electric discharge machine processes	Dr. N. Ramachandran & Dr. Jose Mathew	2012	QIP
7	Joseph, O. A. P050024ME	Effects of flexibility and scheduling decisions on the performance of a flexible manufacturing system:	Dr. R. Sridharan	2012	PT
8	Srividhya, P. K. P050025ME	Characterization and optimum usage of biomass in gasifiers	Dr. S. Jayaraj & Dr. C. Muraleedharan	2012	PT
9	Anil Kumar, S.H. ME04P006	Investigation of natural convective heat transfer in a partitioned enclosure utilizing different fluids	Dr. Biju T. Kuzhiveli	2011	QIP

10	Ashok Kumar, T.V.P060029ME	Life cycle assessment and analysis of biodiesel development as fuel in compression ignition engine	Dr. A. Ramaraju	2012	PT
11	N.H. Siddalingaswamy P050008ME	Effect of vibration on solidification on Al-Si alloy casting using different no-bake moulding sand systems	Dr. M. A. Joseph	2012	(QIP-POLY)
12	M Satyanaryana P060008ME	Investigation on vegetable oil methyl esters as alternative fuels to compression ignition engines	Dr. C. Muraleedharan	2012	(QIP POLY)
13	Vinay Amrut Shirodkar P060028ME	Modelling and analysis of the economic lot scheduling problem	Dr. R. Sridharan & Dr. V. Madhusudanan pillai	2011	PT
14	Manoj Mathew Y3DP18	Abrasive wear behavior of pre-carburized & Boronized low Carbon steel	Rajendrakumar, P.K.	2013	PT

b. On-going Ph. Ds under the Existing Scheme:

Sl. No	Name of the student and Reg. No.	Area of Specialization	Name of other guides	Expected year of completion	Scheme FT/PT/QIP
1	Varaprasad G	Customer adoption of self-service technologies in banking	R. Sridharan and Ananadakuttan B. Unnithan, IIM Kozhikode	Submitted thesis in April 2013	PT
2	Vinay V. Panicker	Supply chain management	R. Sridharan	Submitted thesis in April	PT
3	Rajesh Vanchipura	Flow shop scheduling	R. Sridharan	Submitted thesis in July	FT (QIP)
4	Sajan T John	Reverse logistics	R. Sridharan	-	FT
5	Senthil	Reverse logistics	R. Sridharan	-	PT
6	Solomon joseph	Cross docking in supply chains	R. Sridharan	-	FT
7	Eldose	Supply chain scheduling	R. Sridharan	-	PT
8	Anajana Viswanath	Flow shop scheduling	R. Sridharan	-	FT
9	Arunkumar O.N (P090058ME)	Working capital Management	Dr. R. Radha Ramanan	2014	FT
10	Umarali, K (P090016ME)	Scheduling	Dr. R. Radha Ramanan	2013	PT
11	N. Jayasree (P100033ME)	Forecasting	Dr. R. Radha Ramanan	2013	QIP
12	Mithun Paul (P120019ME)	Scheduling	Dr. R. Radha Ramanan	2015	FT
13	Jobin M.V. (P1000033ME)	Lean Manufacturing	Dr. R. Radha Ramanan	2015	PT
14	Preethi M (P110101MS)	Technology Management	Dr. R. Radha Ramanan	-	PT
15	Binesh Jose (P120046MS)	Strategic Management	Dr. R. Radha Ramanan and Dr. Madhukumar	-	FT
16	Parameswaran Pillai Sreekumar (P120111MS)	Costing	Dr. R. Radha Ramanan and Dr. Madhukumar	-	PT
17	Salwa Ch. (P120077MS)	Marketing Management	Dr. R. Radha Ramanan	-	FT (JRF)
18	Sekar K (P080026ME)	Al alloy pressure casting	Dr. Allesu Kanjirathinkal and Dr.M A Joseph	-	PT

19	Pretheesh K(P110019ME)	Strengthening of Al castings	Dr. Allesu Kanjirathinkal and Dr. M A Joseph; Dr. R. Ravi	-	PT
20	K Jayakumar No P070009ME	Fabrication of particulate composites & their machining	M. A. Joseph and Dr Jose Mathew	2013	PT
21	Ahmed Saleel C P080021ME	Thermal sciences	Dr. S. Jayaraj	Submitted thesis in December	FT
22	Monikantan V V	Wear studies of nanocomposite	M. A. Joseph and Dr P K Rajendrakumar	2015	FT
23	Shaiju M R P110091ME	Gas turbine diagnostics	Dr S Jayaraj and Dr. Arun P	Ongoing	PT
24	Rony Johnson, P110092ME	Solar thermal hybrid systems	Dr S Jayaraj and Dr. Arun P	Ongoing	PT
25	Rupesh S P120092ME	Biomass gasification	Dr. Arun P and Dr. C Muraleedharan	Ongoing	FT
26	Vinod V, P100007ME	Synchronization in mechanical systems	Dr. M.D.Narayanan	-	FT
27	Premchand VP, P110038ME	Nonlinear vibration absorbers	Dr.M.D.Narayanan and A.S.Sajith, CED	-	FT
28	Ajith Kuriakose Mani, P120023ME	Modeling of complex systems using fractional calculus	Dr.M.D.Narayanan	-	FT
29	Rohinikumar. B.	Analysis of solar thermal water pumping system	C. Muraleedharan	-	PT
30	Sajith K.G.	Studies on hybrid solar thermal-pv system	C. Muraleedharan	-	PT
31	Baiju V.	Theoretical and experimental investigations on solar assisted adsorption	C. Muraleedharan	2013 (Viva voce awaiting)	FT
32	Sreejith C.C.	Studies on steam assisted air gasification of biomass	C. Muraleedharan and Dr. Arun P.	2013 (Thesis submission due)	FT
33	Rakesh Hari	Entropy estimation during phase change in heat pipes	C. Muraleedharan	-	FT
34	Basil Kuriachen P110074ME	Manufacturing	Dr. Jose Mathew	-	FT
35	Sreedhar Babu P090030ME	Tribology	K.Prabhakaran Nair and Rajendrakumar, P.K.	Thesis submitted in September 2013	FT
36	Manu V Thottackkad P080011ME	Tribology	Prabhakaran Nair and Rajendrakumar, P.K.	Thesis submitted in December 2012	FT
37	Sreenath A.M. P090017ME	Design	Rajendrakumar, P.K.and M.L.Joy	-	PT
38	Chacko Preno Koshy P110058ME	Design	Dr. Rajendrakumar, P.K.	-	FT

39	Monikandan P110059ME	Material Science	Rajendrakumar, P.K. and M.A.Joseph	-	FT
40	A.P. Sudheer	Robotics	Dr. R. Vijayakumar and Dr. Mohandas	2013	PT
41	K. Srikanth	Robotics	Dr. R. Vijayakumar and Dr. Abraham T Mathew	2014	FT
42	Amit Aravind	Development of a new lubricant	Dr. ML Joy and Dr. K. Prabhakaran Nair	-	FT
43	Rani S	Development of a new lubricant	Dr. K. Prabhakaran Nair and Dr. ML Joy	-	QIP
44	Joseph Babu	Development of a new grease	Dr. ML Joy and Dr. K. Prabhakaran Nair	-	
45	Saijal KK (P110089ME)	Optimization of helicopter rotor	Dr. K. Prabhakaran Nair and Dr. ML Joy	-	PT
46	Anish M N P12007ME	Quality management	Dr. Dhanish P B	-	FT
47	Madhu V V P120065ME	Quality management	Dr. Dhanish P B	-	PT
48	Ramesh M	Quality management	Dr. Dhanish P B	-	FT
49	Kishor Kumar V V P100067ME	Thermal Sciences	Dr. Biju T Kuzhiveli	-	PT
50	Salumuri. S. L. Rao, P110049ME	Design and development of Fuel Cell	Dr.A.Shaija and Dr.S.Jayaraj	-	QIP
51	Mubarak.M, P120027ME	Expt. investigations on the use of biofuels produced from	Dr.A.Shaija	-	FT
52	SrinivasalaRao, P130056ME	Flame acoustic interaction applicable to gas turbines	Dr.A.Shaija	-	PT
53	Rajesh Kana, P130054ME	Expt. investigations on the use of biofuels produced from	Dr.A.Shaija	-	FT
54	Rajesh T N P100005ME	Experimental Studies in Vortex Chamber	Dr. T J Sarvoththama Jothi and Dr. T.	-	FT
55	Jagadessah T P120017ME	Stress and Thermal analysis in welding	Dr. T. J Sarvoththama Jothi	-	PT
56	DeepanRaj B P120073ME	Bio-gasification	Dr. S. Jayaraj Dr. V. Subramaniam	-	FT
57	Bipin Balam P050020ME	Design	Dr. M.D. Narayanan and Dr. P. K. Rajendra	Thesis Submitted in July 2012	FT
58	Dileep K P120098ME	Thermal Science	Dr. S. Jayaraj	-	PT
59	M. Srinivas P070009ME	Energy	Dr. S. Jayaraj	-	PT

60	Remil George Thomas P110056ME	Manufacturing technology	Dr. R. Manu	-	PT
61	Eby Dabid P110030ME	Manufacturing Technology	Dr. R. Manu	-	FT
62	Jobin Varghese P120112ME	Design	Dr. P.K. Rajendra kumar and Dr. K.S. Sivanandan	-	FT
63	Pradeepmon T G P100036ME	Industrial Engineering	Dr. N. Sudarsan	-	PT
64	Deepa Mohan P100072ME	Industrial Management	Dr. N. Sudarsan	-	PT
65	Sreejith B J P120034ME	Industrial Engineering	Dr. N. Sudarsan	-	PT
66	Favas T K P080022ME	Thermal Science	Dr. Ghulam Jilani	-	PT
67	Ciby Thomas ME04P001	Thermal Science	Dr. Ghulam Jilani	-	PT
68	Jesseela S P080010ME	Nano Technology	Dr. C. B. Shoban and Dr. Sarith P Sathian	-	QIP
69	Shijo Thomas P070010ME	Nano Technology	Dr. C. B. Shoban	-	PT
70	PV Manu	Thermal Science	Dr. A. Ramaraju	-	PT
71	David S Vinaykumar P090064ME	Energy Management	Dr. A. Shaija	-	PT
72	Mr. Talari Chinna Pamulety, P080011ME	Analysis of information sharing and inventory	Dr. V. Madhusudanan Pillai	2013	FT
73	Mr. Shiyas C. R., P090044ME	Development and analysis of cell heterogeneity based	Dr. V. Madhusudanan Pillai	2013	FT
74	Mr. Suresh Kumar M. R., P090051ME	Planning annualised hours	Dr. V. Madhusudanan Pillai	-	PT
75	J. Laxmi Lalitha, P090072ME	Manufacturing execution system	Dr. V. Madhusudanan Pillai	-	PT
76	Nidhi M. B., P100077ME	Green supply chain management	Dr. V. Madhusudanan Pillai	-	PT
77	Abdul Nazar K. P., P120005ME	Analysis of pull control policies for multi-product	Dr. V. Madhusudanan Pillai	-	FT
78	Joby George, P120088ME	Analysis of inventory policies in supply chain	Dr. V. Madhusudanan Pillai	-	FT
79	Rajesh VR P110031ME	Thermal Sciences	Dr. Biju T Kuzhiveli	-	FT
80	Bharatbhushan V Kamble P070016ME	Thermal Sciences	Dr. Biju T Kuzhiveli	-	PT

C. Proposed Ph.D. programmes :

- PhD programmes in emerging areas of mechanical engineering such as Green energy, Bio medical engineering, nano-tribology, fluid acoustics.

DEPARTMENT OF MATHEMATICS

a. Ph.D.s completed under Existing Scheme:

Sl. No.	Name	Guide	Area of Specialization	Scheme (QIP/Part Time/Full time)
1	Babitha.K.V	Dr.Sunil Jacob John	Soft Sets	Full Time.

b. On-going Ph.Ds under the existing Scheme:

i)Full Time

Sl. No.	Name	Guide	Area of Specialization	Scheme (QIP/Part Time/Full time)
1	Minirani S	Dr. Sunil Mathew	Fractal Interpolation	Full time
2	Mubeen M	Dr. V. Narayanan (MAT) & Dr. G. Abhilash (ECD)	Wavelets Analysis	Full time
3	Deepak D	Dr.Sunil Jacob John	Rough sets	Full time
4	Dharshanlal M Nair	Dr. Sunil Mathew	Weighted Graph Theory	Full time
5	Priyadarsan K P	Dr. Satyananda Panda	Fluid Dynamics	Full time
6	Shahida.A.T	Dr. M.S.Sunitha.	Topological Graph Theory	Full time
7	Bajeel.P.N	Dr. Mahesh Kumar	Reliability	Full time
8	K.M. Abdushukoor	Dr. C.M.Sushama	Network Optimization.	Full time
9	Naveen.P	Dr. Chithra.A.V	Algebraic Graph Theory	Full time
10	Rubell Marion Lincy	Dr. Jessy John	Stochastic Modelling	Full time
11	Vijitha Mukundan	Dr.Ashish Awasthi	Singularly Perturbed Differential Equations	Full time
12	Siju.K.C	Dr. Mahesh Kumar	Reliability Optimization	Full time
13	Jahfar.K.T	Dr. Chithra .AV	Spectral Graph Theory	Full time

ii) Part time

Sl. No	Name	Guide	Area of Specialization	Scheme(QIP/Part Time/Full Time)
1	Shinoj T K	Dr.Sunil Jacob John	Multi sets	Part time
2	Bobby P Mathew	Dr.Sunil Jacob John	Rough Topology	Part time
3	K R Sandeep Narayan	Dr.M.S.Sunitha	Fuzzy Graph and its compliments	Part time
4	Shinto K G	Dr.Sushama C M	Optimization Techniques	Part time
5	Shija.G	Dr.M.J.Jacob	Stochastic Processes	Part time
6	Chitralekha K	Dr.Jessy John C	Time Series Modelling and Forecasting	Part time

7	Mini Tom	Dr.M.S.Sunitha	Fuzzy Graph Theory	Part time
8	Linda J P	Dr.M.S.Sunitha	Fuzzy Graph Theory	Part time
9	Jyothis Thomas	Dr.Sunil Jacob John	Topology	Part time
10	Jill K Mathew	Dr. Sunil Mathew	Graph Theory	Part time
11	Shanas Babu P	Dr. Chithra A V	Graph Theory	Part time
12	Jinesh P Joseph	Dr. Ashish Awasthi	Numerical Techniques for singular perturbation	Part time
13	Shinoy George	Dr. Sushama C M	Optimization	Part time
14	Jayasree T G	Dr. Chithra A V	Graph Theory	Part time
15	Anjali Kishore	Dr.M.S.Sunitha	Coloring of Fuzzy graphs	Part time
16	Rinju Balu K.K.	Dr. Sunil Mathew	Fractal Theory	Part time
17	Jincy.N	Dr. Sunil Mathew	Graph Theory	Part time
18	Anoop N Nair	Dr.M.J.Jacob	Queueing Theory	Part time
19	Dhanya V Mukundan	Dr Satyananda Panda	Fiber Dynamics	Part time
20	Jaya Paul	Dr. Sunil Jacob John	Rough Sets	Part time

c. **Proposed Ph. D programmes:** continuing with the existing programmes

DEPARTMENT OF CHEMISTRY

a. **Ph. Ds completed under Existing Scheme : NIL**

b. **On-going Ph. Ds under the Existing Scheme**

Sl. No.	Name	Guide	Area of Specialization	Scheme (QIP/Part Time/Full time)
1	Suraj Varma	Dr. G. Unnikrishnan	Polymer Science & Technology	Full time
2	Riyasudheen N	Dr. Sujith A	Biomaterials	Full time
3	Rafeeqe P	Dr. G. Unnikrishnan	Polymer Science & Technology	Part time
4	Souda.P	Dr. Lisa Sreejith	Surface Chemistry	Full time
5	Sunil Kumar M	Dr. Sujith A	Polymer science & technology	Part time
6	Sangeetha C	Dr. G. Unnikrishnan	Polymer Science & Technology	Part time
7	Abineesh Babu	Dr. Lakshmi C	Bio-organic chemistry	Full time
8	Jasila K	Dr. Lisa Sreejith	Surface Chemistry	Full time
9	Sruthi C	Dr. Suni Vasudevan	Bioinorganic Chemistry	Part time
10	Sheeja	Dr. Sujith A	Polymer science & Technology	Full time
11	Fasalu Rahman	Dr. Arunkumar C	Bio-inorganic Chemistry	Full time
12	Linnet Rose	Dr. Lisa sreejith	Surface Chemistry	Full time
13	Rojisha V.C.	Dr. Parameswaran P	Computational Chemistry	Full time
14	Rahul Soman	Dr. C Arunkumar	Bio-inorganic Chemistry	Full time

15	Reshmi C.R.	Dr. A. Sujith	Polymer Science & Technology	Full time
16	Nijesh K	Dr. Parameswaran P	Computational Chemistry	Full time
17	Manju Chembath	Dr. Lakshmi C	Bio-organic chemistry	External
18	Anusha C	Dr. Parameswaran P	Computational Chemistry	Full time
19	Nimisha K	Dr. G. Unnikrishnan	Polymer Science & Technology	Full time
20	Indu P	Dr. Parameswaran P	Computational Chemistry	Full time
21	Divya T.T.	Dr. Lakshmi C	Bio-organic chemistry	Full time
22	Premjith U.P.	Dr. Suni Vasudevan	Bioinorganic Chemistry	Full time
23	Bindu M.	Dr. G. Unnikrishnan	Polymer Science & Technology	Full time
24	Amritha B.	Dr. Suni Vasudevan	Bioinorganic Chemistry	Full time
25	Ramesh J.	Dr. Arunkumar C	Bio-inorganic Chemistry	Full time
26	Shyvindraj U.P.	Dr. Lakshmi C	Bio-organic chemistry	Full time
27	Janisha Jayadevan	Dr. G. Unnikrishnan	Polymer Science & Technology	Full time
28	Mr. Yoganandan G	Dr. Lakshmi C	Bio-organic chemistry	External
29	Mrs. Tesi Thomas	Dr. Sujith A	Polymer science & Technology	Part time
30	Mr. Nishad K.V.	Dr. G. Unnikrishnan	Polymer Science & Technology	Part time

c. **Proposed Ph.D. programmes:NIL**

DEPARTMENT OF PHYSICS

a. **Ph.D. completed under existing scheme:**

Sl.No.	Name	Guide	Area of Specialization	Scheme
1.	Dr. Sudheesh. P	Dr. Chandrasekharan. K	Non linear optics	Full time

b. **Ongoing Ph.D. under existing scheme:**

Sl. No	Name	Guide	Area of specialization	Remarks
1	Aneesh .J	Dr. P. Predeep	Polymer Memmories	4 years completed
2	Faseena .N.M	Dr. P. Predeep	Organic Electronics	3 years completed
3	Jayan Manuel	Dr. P. Predeep	Organic Electronics	Progressing
4	Renu Jose	Dr. P. Predeep	Photonics	Progressing
5	Murali Krishnan M	Dr. P. Predeep	Spintronics	External
6	Kulkarni Prabhanjan Dilip	Dr. P. Predeep	Spintronics	External
7	Praveen T	Dr. P. Predeep	Organic Electronics	Progressing
8	Shiju K	Dr. P. Predeep	Organic Electronics	Progressing
9	Sandhya K	Dr. P. Predeep	Organic Electronics	Progressing
10	Siji Narendran	Dr. Chandrasekharan .K	Non linear optics	Progressing
11	Smijesh Nadarajan Achary	Dr. Chandrasekharan .K	Non linear optics	Started this year
12	Divyasree M. C	Dr. Chandrasekharan .K	Non linear optics	Progressing

13	Ayishabi .P.K	Dr. Raghu Chatanathodi	Electronic Structure, Surface Phenomena	Part Time
14	Lakshmikanth .G	Dr. Raghu Chatanathodi	Electronic Structure, Surface Phenomena	Started this year
15	Daughty John	Dr. Raghu Chatanathodi	Electronic Structure of Graphene and other nano-structures	Part Time
16	Satheesh Chandran. P. M	Dr. M. K. Ravi Varma	Applied Optics	Progressing
17	Issac S. I.	Dr. M. K. Ravi Varma	Applied Optics	Part Time, in progress
18	Suhail Kuttoth	Dr. M. K. Ravi Varma	Spectroscopy	Started this year
19	Yoosuf Ameen	Dr. Vari Sivaji Reddy	Organic Solar cells	Full time
20	Mr. Naseer A. P.	Dr. P. K. Madhavan Unni	Critical Point Phenomena	Full Time
21	Julin Joseph	Dr. Aji A Anappara	Carbon Quantum Dots (Material Science)	Full time
22	Nishaina Sahadev	Dr. Aji A Anappara	Graphene (Material Science)	Full time
23	Simimol. A	Dr. Aji A. Anappara (Internal guide)	Graphene (Material Science)	External

c. Proposed Ph.D programmes: NIL

DEPARTMENT OF PHYSICAL EDUCATION

a. Ph. Ds completed under Existing Scheme: NIL

b. On-going Ph. Ds under the Existing Scheme (Bharathiar University & Karpagam University)

Sl. No.	Number of candidates	Guide	Area of Specialization	Scheme (QIP/Part Time/Full time)
1.	09	Dr. A M Najeeb	Physical education	Part-time

c. Proposed Ph.D. programmes: NIL

SCHOOL OF MANAGEMENT STUDIES

a. Ph. Ds completed under Existing Scheme: NIL

b. On-going Ph. Ds under the Existing Scheme

Sl. No.	Name	Guide	Area of Specialization	Scheme (QIP/Part Time/Full time)
1	Preeti. M	Dr.T.Radharamanan	Tech Management	Part Time
2	Lakshmi Chandra. M	Dr.N.Sudarsan	HR	Part Time
3	Salwa. C. H	Dr.T.Radharamanan	Marketing	Full time
4	Shobitha Poulose	Dr.N. Sudarsan	HR	Full Time
5	Sreekumar Pillai	Dr.T.Radharamanan	Finance	Part Time
6	Biju Mathew	Dr.N.Sudarsan	Finanace	Part Time

c. Proposed Ph.D. programmes: NIL

SCHOOL OF BIOTECHNOLOGY

a. Ph. Ds completed under Existing Scheme: Nil

b. On-going Ph. Ds under the Existing Scheme:

S. No	Name	Guide	Area of specialization	Scheme (QIP/Part time/ Full time)
1	Mr. B Praveen Kumar Reddy	Dr. Md. Anaul Kabir	Molecular Biology	Full time
2	Ms. Aswathy N	Dr. Md. Anaul Kabir	Protein folding	Full time
3	Mr. Wasim Uddin	Dr. Md. Anaul Kabir	Drug Resistance	Full time
4	Ms Vidhuna Sadanandan	Dr. A. Santhiagu	Enzyme technology	Full time
5	Mr. Jaya Prakash S	Dr. A. Santhiagu	Bioprocess technology	Full time
6	Mr. Yuvaraja K. R.	Dr. A. Santhiagu	Herbal Biotechnology	Full time
7	Ms. Divya A	Dr. A. Santhiagu	Bioprocess technology	Full time
8	Mr. Mahesh Kumar Teli	Dr. Rajnikant G.K	Drug design	Full time
9	Mr. Pradeep H.	Dr. Rajnikant G.K	Neuroscience	Full time
10	Mr. Shyam B. Nair	Dr. Rajnikant G.K	Nano Biotechnology	Full time
11	Mr. S. Md. A. Fayaz	Dr. Rajnikant G.K	Bioinformatics	Full time
12	Mr. Sinoy sugunan	Dr. Rajnikant G.K	Bioinformatics	Full time
13	Arun Anirudhan	Dr. Rajnikant G.K	Bioinformatics	Part time
14	Mr. Prakash A.	Dr. K. Rathinasamy	Cancer biology	Full time
15	Ms. Lakshmi mohan	Dr. K. Rathinasamy	Cancer biology	Full time
16	Ms. Geethu Chellapan	Dr. Aswati Nair	Plant Biotechnology	Full time
17	Ms. Keerthi Divakaran	Dr. Aswati Nair	Plant Biotechnology	Full time
18	Mr. Ganapaty .G	Dr. Aswati Nair	Plant Biotechnology	Full time
19	Ms. Saumya mary mathew	Dr. Suchithra.T.V	Enzymology	Full time
20	Mis. Anna Saju Kynadi	Dr. Suchithra.T.V	Bioplastics	Full time
21	Mis. Sareena .C	Dr. Suchithra.T.V	Enzymology	Full time
22	Mr. Ajith S	Dr. K. Rathinasamy	Natural products	Full time
23	Mr. Dileep Pullepu	Dr. Md. Anaul Kabir	Fungal Genomics	Full time
24	Mrs. Nisha Salim	Dr. A. Santhiagu	Enzymology	Full time
25	Mrs Joji K	Dr. A. Santhiagu	Enzymology	Full time
26	Mr. Saravana Perumal P	Dr. A. Santhiagu	Vaccine Technology	Full time
27	Mr Suvanish Kumar V S	Dr. Rajnikant G.K	Drug design	Full time
28	Ms Deepa K Raj	Dr Rathinasamy	Cancer biology	Part Time

c. Proposed Ph.D programmes: NIL

SCHOOL OF NANO SCIENCE & TECHNOLOGY

a. PhD's completed under existing scheme:

Sl.No.	Name	Guide	Area of Specialization	Scheme (QIP/Part time/Full time)
1	Manjusha Mathew	N. Sandhyarani	Biosensors	Thesis Submitted
2	Sooraj K Prabha	Sarith P Sathian	Nanofluidics/ Rarefied gas flows	Full time

b. On-going PhD's under existing scheme:

Sl.No.	Name	Guide	Area of Specialization	Scheme (QIP/Part time/Full time)
1	Ajin C. Sajeevan	V. Sajith	Synthesis of Catalytic Nano particles and its application as Fuel additives	Full time
2	S. Balamurugan	V. Sajith	Investigation on the Effect of Catalytic Nano particles in fuels on Combustion using Optical measurement Techniques	Full time
3	Vipin.P.Antony	V.Sajith	Corona discharge system	Full time
4	Parvathy R Chandran	N. Sandhyarani	Targetted Drug Delivery	Full Time
5	Abdul Rasheed P	N. Sandhyarani	DNA sensors	Full Time
6	Reny Thankam Thomas	N. Sandhyarani	Environmental Nanotechnology	Full Time
7	Rahul T k	N. Sandhyarani	Photonic Band gap structures	Full Time
8	Nair Tulasi Radhakrishnan	N. Sandhyarani	Fuel cells	Full Time
9	Nimmy John	N. Sandhyarani	Liquid Crystal Display	KSCSTEC Project fellow
10	Nandu Gopan	Sarith P Sathian	Nanofluidics	Full time
11	Jeetu S babu	Sarith P Sathian	Nanofluidics	Full time
12	Arun Kumar K V	Sarith P Sathian	Combustion	Full time
13	Anjan R Nair	Sarith P Sathian	Nanoscale Interfacial thermal science	Part time
14	Joe Francis T	Sarith P Sathian	Nanoscale Interfacial thermal science	Part time

c. Proposed PhD programmes: NIL

5.2 DETAILS OF Ph.D DONE SO FAR

Sl.No	Department	No.of Ph.D Completed	Scheme		
			QIP	FT	PT
1	Architecture	1	1	-	-
2	Civil Engineering	24	-	-	-
3	Computer Science & Engineering	8	2	3	3
4	Electrical Engineering	25	4	2	19
5	Electronics and Communication Engineering	21	8	9	4
6	Mechanical Engineering	14	4	2	8
7	Mathematics	12	-	3	9
8	Chemistry	22	-	15	7
9	Physics	4	-	3	1
10	School of Nano Science & Technology	2	-	2	-
11	School of Management Studies	1	-	1	-

5.3 PROPOSED PLAN FOR RESEARCH

DEPARTMENT OF ARCHITECTURE

- Department also proposes to establish a Remote Sensing and GIS Laboratory
- Department is in the process of setting up a Material Museum
- Department is developing a virtual design studio for furthering interaction in Architectural. Design studio work with other universities.
- Department is also developing Architectural Photography and Documentation lab.
- It is proposed to further develop the building science lab in the areas of acoustics, illumination, thermal studies and wind flow studies.

DEPARTMENT OF CIVIL ENGINEERING

- The Department proposes to enhance the research activities by attracting more number of sponsored research programmes from industries, apart from taking up routine research programmes funded by funding agencies like CSIR, DST, AR & DB, MHRD etc. The Department also wishes to encourage more and more Scientists / Engineers from R & D institutions to avail the External Registration Scheme to enroll for Ph.D programmes. The Department also wishes to undertake collaborative research work leading to the award of Ph.Ds.
- The Department carries out / propose to carry out research on the following areas/topics:
 1. Rheology of Cementitious materials
 2. Studies on application of fracture mechanics to cementitious materials
 3. Strength and behaviour of Geo-Polymer concrete structural elements
 4. Studies on the effect of Hybrid Fibres on the Strength and Behavior of High Performance Concrete
 5. Studies on the effect of Ferro cement as a retrofitting material
 6. Development of sustainable concrete and other techniques
 7. Studies on strength and behavior of FRC shear wall
 8. Water Quality Modelling/Economics, Travel Demand Modelling
 9. Travel Behaviour Modelling and Stated and Revealed Preference Survey planning and design
 10. Dynamic soil-structure Interaction using laminar shaking box test facility
 11. Research related with antibiotics and pesticides removal by membrane reactors
 12. Retrofitting techniques for prototype beam column joints
 13. Studies on High Performance Concrete Shear wall- Frame Interaction
 14. Strength and Behaviour of RC Multistoried Frames with different Infills
 15. Retrofitting of Beam Column Joints under Seismic Loading using SIMCON Composites
 16. Structural Control using mass dampers and Performance based design of Structures
- Biomechanics - Setting up a low -cost gait analysis lab
- Setting up Centre of Excellence in Transportation Engineering – Centre for Transportation Research, Education And Training (cTREAT). Proposal submitted to MHRD for a budget of Rs.816 crores.

DEPARTMENT OF ELECTRICAL ENGINEERING

Department has identified four major areas for research and development, namely, Energy & Power Systems, Control & Instrumentation, Electrical machines and Power Electronics and Industrial Power & Automation. Department has also undertaken sponsored research activities for strengthening the areas of expertise. Department has already completed about 18 sponsored research projects.

Ongoing sponsored research projects are (1) 'Development of Centre for Distributed Energy Research' under DST-FIST (Rs 100 lakhs –Dr Ashok S), (2) Development of composite insulators for high energy storage applications under DST –FT (Rs 23 lakhs –Dr Sindhu T K), (3) Development of intelligent robot for fault diagnosis of power lines” under KSCSTE, Govt of Kerala (Rs 11 lakhs –Dr Ashok S (4) Investigation of distributed generation & integration on a laboratory scale Microgrid under DRDO (Rs 7 lakhs –Dr Elizabeth P Cherian.), and (5) Non Linear analysis of EEG signals in patients with Alzheimers under DST-FT (Rs 17 Lakhs – Dr. Subha DP)

Dr Ashok S has already submitted a research proposal on Development of Smart Controller for Plug-in Hybrid Electric Vehicle to DST (Rs 80 lakhs) which is under review.

Dept. faculty is proposing to submit research proposals to various funding agencies in the following area:

- High Voltage.
- Power Quality Research.
- Smart Grid.
- Robotic Facility and Automation

DEPARTMENT OF MATHS

- Research programmes leading to Ph. D
Areas of specialization:
 - Stochastic Processes
 - Time series Modelling
 - Operator Theory
 - Queuing Theory
 - Fuzzy Topology, Multi set Theory
 - Fuzzy Graph Theory
 - Fuzzy Optimization
 - Harmonic Analysis
 - Computational Fluid Dynamics, Modeling & Scientific Computing
 - Algebraic Graph Theory, Algorithms & Complexity
 - Optimization Theory
 - Fuzzy Graph Theory, Biocomputational modeling, Fractal Geometry
 - Applied Statistics, Reliability of systems
 - Numerical Analysis, Singular Perturbation
- Ongoing research projects
Projects ongoing
 - Project titled “Fuzzy Graph Clustering” funded by Department of Atomic Energy, Govt. of India; coordinators Dr. M.S. Sunitha and Dr. Sunil Mathew.
 - Project titled “Fuzzy Networks” funded by University Grand Commission , Govt. of India; Coordinator Dr. Sunil Mathew.
 - Project titled “Applications of Partial Cuts in Graph Networks”, FRG Scheme of NIT Calicut; Coordinator Dr. Sunil Mathew.
 - Project titled “Fiber Dynamics”, FRG Scheme of NIT Calicut; Coordinator Dr. Satyananda Panda.
 - Project titled “Bayesian Reliability Estimation, Prediction and Test Plans for Multi-component Systems”; Coordinator Dr. Mahesh Kumar
- Submitted research proposals to different funding agencies

DEPARTMENT OF CHEMISTRY

One of the areas that the bio-organic chemistry laboratory focuses on is the development of low molecular weight stimuli responsive sensors for cations, anions and biologically important molecules. Development of fluorogenic peptides to explore peptide aggregation and conformational transitions is a rather under explored area and effort will be made to study the detailed mechanism that underlies these phenomena. Design and synthesis of smart materials, the properties of which can be controlled externally, will be attempted in the coming year.

Polymer research group mainly focuses on the development and characterization of multi-phase polymer systems. This includes blends and short natural fiber reinforced polymer composites. The group is also interested in polymer-based nano composites. The development and characterization of polymer membranes for the separation of liquid mixtures, including azeotropes, forms the major research interest in the next two years.

Soft Materials research group will concentrate on the study of the possible structural transitions in micellar media, which can have applications to various fields of interest. To materialize a molecular valve incorporating surfactants with zeolites, polymers, latex, their characterization, a biocompatible packing material from natural resources and a temperature tunable optical sensor/filter are the plans for the coming year. The group also focuses on developing energy conversion technology from waste materials. Developing an ecofriendly solution for the safe use of plastic products of daily purpose is another area that is actively pursued.

Developing transition metal based coordination complexes for binding interaction studies with mammalian DNA. This will give more insights into the mechanism and modes of binding, which will in turn facilitate development of new generation drugs with site specific activities.

The research of computational chemistry group mainly focuses on the applications of theoretical and computational methods to solve problems in organic, organometallic and main group chemistry as well as nano-materials. The most key aspect of the studies are structure, bonding, reactivity, reaction mechanism in molecular level and the growth of nanomaterial, **their properties and reactivities in the nanoscale.**

DEPARTMENT OF PHYSICS

Dr. Chandrasekharan .K:

Nonlinear optical study of organometallic complexes with nano & pico second time domain.

Dr. Vari Sivaji Reddy:

I am a solid state experimental physicist working on optoelectronic and charge carrier transport properties of organic semiconductor devices such as light emitting diodes, solar cells and bistable memory devices. My research interests include development of bulk hetero-junction solar cells based on organic semiconductor nanostructures and studies on switching mechanism of bistable memory devices based on organic semiconductors and metal nanoparticles. I am planning to submit a proposal to Department of Science and Technology (DST) under "Fast Track Scheme for Young Scientists" in the next few weeks time. At present, I am trying to setup a laboratory for organic and Nanoelectronics.

Dr. P. K. Madhavan Unni:

Light scattering investigations near the quadruple critical point in the quaternary liquid mixture Methyl-ethyl-ketone + water + secondary butyl alcohol (FRG-proposal under preparation) and non-linear dynamics in polymer solutions (project proposal under preparation).

Dr. Aji A. Anappara:

Optics of carbon quantum dots: The goal of our research in this direction is to explore a suitable protocol for the synthesis of C-dots with high fluorescence quantum yield and to get a better understanding into the origins of their photo physical behavior. Once a deeper knowledge of their fundamental properties is achieved, C-dot based nanodevices may be envisioned.

Photochemical fuels based on nanomaterial hybrids: In this project, we intend to develop such a photochemical fuel, based on nanomaterials-templated photoactive molecules. On exposure to sunlight, these hybrid materials capture light energy and get converted to a high-energy conformation, whose subsequent triggered reversal to the stable low-energy form release the stored energy as heat.

SCHOOL OF BIOTECHNOLOGY

Research is planned in the following areas

1. Gene Regulation
2. Molecular Genetics
3. Protein Folding
4. Protein Engineering
5. Genetic Engineering
6. Biomodeling and Drug Design
7. Plant Molecular Biology
8. Neurobiology
9. Immuno Technology
10. Enzyme Technology
11. Cell Biology
12. Cancer Research

SCHOOL OF MANAGEMENT STUDIES

Continuing research in Management

5.4 INSTITUTE – INDUSTRY COLLABORATION

DEPARTMENT OF ARCHITECTURE

Sl. No.	Name	Firm & Description of the work
1	Dr. P. P. Anilkumar Dr. Naseer M. A.	Interior Layout Design and Accoustical Design of a 1,000 capacity Auditorium for Koyilandy Municipality
2	Dr. P. P. Anilkumar Dr. Naseer M. A.	Project Report Preparation for the Comprehensive renovation of Maharaja's College, Ernakulam
3	Dr. A. K. Kasthurba	Renovation of Tali temple and Miskal Mosque
4	Dr. A. K. Kasthurba	Retrofit of sea facing wall of Kannur fort
5	Dr. A. K. Kasthurba	Preparation of Technical report- Architectural conservation of Iringannoor temple, Vatakara Funds obtained- 5,5 crores by ONGC and Thiruvangad temple , Tellicherry (funds to be obtained)

DEPARTMENT OF CIVIL ENGINEERING

Sl. No.	Organisation
1	Airport Authority of India, Calicut Airport.
2	CPWD, Calicut
3	Wayanad District Panchayat
4	Tirur Municipality, Malappuram
5	Southern Railway
6	LIC of India, Branch Office, Sulthan Bathery, Wayanad Dist.
7	L & T, ECC division
8	Steel Complex Ltd. P.B No. 42, Feroke, 673631, Calicut
9	Kerala State Electricity Board
10	Kerala Water Authority

11	Malabar Institute of Medical Science Ltd. Calicut-16
12	The Assistant Engineer, N H Bypass Junction Nellikode, Civil Station, Kozhikode
13	The Secretary, Uralungal Labour Contract Co-Operative Society Ltd. Vatakara.
14	IVRCL Infrastructures & Projects Ltd, Indraneelam, Madathil Lane, Chevayoor (P.O), Kozhikode-17
15	Minor irrigation division, Kasargode
16	M/S Aban Constructions (P) Ltd. KWA - JBIC Drinking Water Project, Perumannamuzhi(Post), Kozhikode-673528
17	Mangalore port trust
18	The Assistant Executive Engineer, Office of the Assistant Executive Engineer, KRP Subdivision No.II, Vazhavatta.
19	Kalamassery Municipality, Cochin
20	Mahe Municipality
21	National High way authority of India Kalamassery, Eanakulam - 683 104
22	Prasar Bharathi Broad Casting Corporation of India, O/o the Additional Director General(E), Chennai
23	Aluva Municipality, Aluva - 683101
24	Kochi Metro Rail Project, Eastern Entry Tower, Eranakulam Southern Railway Station Kochi - 686 016
25	The Municipal Secretary, Cherthala
26	The Regional Engineer, Kerala State Nirmidhi Kendra, Regional Nirmidhi Kendra, Kozhikode
27	The Asst. Executive Engineer, Fishery Harbour Project, Sub-Sub Division, Harbour Engineering Dept., Koyilandy
28	M/S KITKO, Cochin
29	Many other Govt., Semi Govt. and Private Organisations

DEPARTMENT OF COMPUTER SCIENCE & ENGINEERING

Large number of M.Tech Students are doing their Projects in Intel and IBM

DEPARTMENT OF ELECTRONICS & COMMUNICATION ENGINEERING

Sl. No.	Title of the Project	Firm & Description of work
1	Praveen Sankaran • Image Processing	Travancore Analytics Ltd., Technopark, Trivandrum. Collaborative project work on Image Processing.

DEPARTMENT OF MECHANICAL ENGINEERING

Sl. No.	Name	Firm & Description of the work
1	Dr. Dhanish P B	Short term course in Metrology and Computer Aided Inspection. M/s NTTF, Tellicherry Revenue: Rs. 68,900/-
2	Dr. Jose Mathew	Training of SIDCO Students on CAD-CAM
3	Dr. Jose Mathew	Training of NTTF Students on CAI

DEPARTMENT OF CHEMISTRY

Sl. No.	Name	Firm & Description of the work
1	G. Unnikrishnan	1. Choice Rubbers, Koodaranji, Calicut. 2. Hevea Rubbers, Calicut. Consultancy for Rubbers. Adhesives etc.

SCHOOL OF NANO SCIENCE AND TECHNOLOGY

Sl. No.	Name	Firm & Description of the work
1	Enercons Corporation	-

5.5 INNOVATIONS AND TECHNOLOGY TRANSFER

DEPARTMENT OF ARCHITECTURE

The B. Arch programme offered is designed to instill a good understanding of Building Climatology, Structures and Construction. It also enables better understanding of the Architecture practice through comprehensive training in realization of projects. The knowledge transfer emphasizes on adequate field exposure through case studies, professional training, studios and thesis work. Guest Lectures, Visiting Faculty interactions and short term courses are chosen to expose the students to career and subject possibilities even while providing the faculty opportunities for development.

DEPARTMENT OF CHEMISTRY

Isolation of nano -cellulose from banana plant ...(Being processed for patent)

6.0 THE COUNCIL, BOG, AND OTHER COMMITTEES

6.1 INSTITUTE'S COUNCIL

The Senate is the institute council to decide upon all academic matters. The Senate of the institute

consists of the following members:

- ⊙ The Director, ex-officio, who shall be the Chairman of the Senate
- ⊙ The Professors appointed or recognized as such by the institute for the purpose of imparting instruction in the Institute
- ⊙ Three persons, one of whom shall be a woman, not being employees of the institute, to be nominated by the Chairman.BOG in consultation with the Director from among educationists of repute, one each from the field of science , engineering and humanities
- ⊙ Such other members as laid down in the Statutes

6.2 BOARD OF GOVERNORS

Constitution of Board of Governors

- ⊙ The Chairperson to be nominated by the Visitor.
- ⊙ The Director, ex officio.
- ⊙ Two persons not below the rank of the Joint Secretary to the Government of India to be nominated by the Central Government from amongst persons dealing with technical education and finance.
- ⊙ Two persons to be nominated by the Government of the State in which the Institute is situated from amongst persons, who, in the opinion of that Government, are technologies or industrialists of repute.
- ⊙ Two persons, at least one of whom shall be a woman, having special knowledge or practical experience in respect of education, engineering or science to be nominated by the Council and
- ⊙ One professor and one assistant professor or a lecturer of the Institute to be nominated by the Senate.

6.3 FINANCE COMMITTEE

The Finance Committee consists of the following members:

- ⊙ The Chairperson Board of Governors, ex-officio Chairman
- ⊙ The Director, ex-officio member
- ⊙ Joint Secretary dealing with National Institutes of Technology or his nominee and Financial Advisor (Human Resource Development) or his nominee members
- ⊙ Two persons nominated by the Board from amongst its members and
- ⊙ The Registrar, ex-officio Member Secretary
Provided that in addition to the above, the Chairman may, in consultation with the Director, co-opt a member as and when found necessary.

6.4 BUILDING AND WORKS COMMITTEE

The Building and works committee consists of the following members:

- ⊙ The Director, ex-officio Chairman
- ⊙ One member nominated by the Central Government not below the rank of Director or Deputy Secretary
- ⊙ One member nominated by the Board of Governors
- ⊙ The Registrar, ex-officio, Member Secretary

- Dean, Planning & Development or similar position – Member and
- One expert each from Civil and Electrical Engineering Wing of Central or State Government or any autonomous body of repute - Member

7.0 CONCESSION FOR SC, ST & HANDICAPPED STUDENTS

7.1 Concessions provided for students:

Educational Concession to SC/ST/OEC/SEBC (under KPCR) students: Students from Kerala are eligible for educational concessions from the SC & ST Development Departments as per the norms of Government of Kerala. Students from other State can apply for scholarships as per the rules of the respective States.

In addition, National Scholarships are also offered to Persons With Disabilities for pursuing technical and professional courses for recognized institutions by the National Handicapped Finance and Development Corporation (NHFDC) Faridabad on behalf of Ministry of Social Justice & Empowerment, Govt. of India subject to fulfill the conditions laid out by them.

A New Central Sector Scholarship Scheme to the first top 12 SC and 5 ST students of Top Class Education given by the Central Government (Ministry of Social Justice and Empowerment & Ministry of Tribal Affairs, respectively) [i.e. Institute Tuition Fee + Boarding charges + Books & Stationary + Cost of a PC- (P-IV Computer, UPS, Printer, Multimedia)] based on their entrance rank. Family income limit is Rs.4.5 lakhs per annum.

Merit cum Means Scholarship for eligible Minority Communities in Kerala and other States given by the Ministry of Minority Affairs, Govt. of India.

District Merit Scholarships to eligible students in Kerala by the Directorate of Collegiate Education, Thiruvananthapuram.

Central Sector Scholarship Scheme for eligible College & University students by the Department of Higher Education, Ministry of Human Resources Development, Govt. of India.

7.2 Concessions provided for staff :Faculty members are given concession in fee for Part time

8.0 FINANCIAL STATUS

8.1 ANALYSIS OF PLAN AND NON-PLAN GRANTS

Particulars	Rs. in lakhs			
	2009-2010	2010-2011	2011-2012	2012-2013
Govt. of India –Grant (Non-Plan)	3964.00	3900.00	3700.00	4800.00
State Govt. Grant (Non-Plan)	-	-	-	-
Govt. of India Grant (Plan-General)	3200.00	5504.00	4300.00	5949.99
Govt. of India (Plan-OSC)	4900.00	2200.00	1300.00	

8.2 SOURCES OF FUNDS

8.3 EXPENDITURE POSITION FOR LAST THREE YEARS

Particulars	Rs. in lakhs		
	2010-2011	2011-2012	2012-2013
Expenditure- (a) Under Plan(General)	6557.26	6245.99	2673.92
Expenditure -(b) Under Plan(OSC)			
Expenditure-Under Non-Plan	4909.22	5847.93	6772.18

9.0 CENTRAL FACILITIES AND SERVICES

9.1 COMPUTING & IT SERVICES

9.1.1 CENTRAL COMPUTER CENTRE

Central Computer Centre (CCC) is the central facility in NIT Calicut which caters for the computing requirements of the whole community of this institution. The working hours of this centre is round the clock on all working days except the national holidays unless instructed otherwise. The centre is equipped with various systems, servers and softwares. Some of the computational softwares and packages for the other departments run from the servers maintained in the CCC. All students and staff in the institute are entitled to have a login in the centre. The centre has a maximum of 500 user capacity distributed in the 5 terminal rooms. The installed capacity in the 3 terminal rooms through structured networking at present caters about 200 users at a time. Apart from the routine activities and jobs, the centre undertakes services such as providing facility for credit laboratory, programming classes, faculty development programs, workshop and conferences, online test of various recruiting firms, online test conducted for students by faculty, summer school training and tests, feedback collection of the funding agencies, TEQIP activities, registration, teacher evaluation, counseling of post graduate and undergraduate students for the 10 academic departments, training undertaken by the institute for various Government firms, engaging social service training, providing staff for such services etc. A state of the art Super Computer Facility named as PURNA with 1.6 Tera FLOPS speed as fully been setup and commissioned recently and NIT Calicut is the first NIT to have the Super Computer Facility in this country. The Facility accessible for all the departments and schools anywhere in the campus through networking. All Post graduate and Ph.D scholars and computational intensive UG students are welcomed to use this facility. The centre possesses a bundle of softwares, packages and OS for diversified applications. The centre is currently engaged in setting up facility for engineering work stations and also terminals for high performance computing facility for the use of students and faculty. On an average more than 600 users make use of the facility within CCC and accessed from various departments on per day basis presently. CCC plans to expand and transform in to a world class facility in the near future with a futuristic outlook by strongly activating the super computer user group activities, and encompassing Parallel Computing Servers, Multi-Processor Compute Servers, Application Servers Utility Servers etc.

Available Resources

Super Computer "PURNA" (Parallel Universal Remote Numerical Analyser)

Main Features: Speed 1.5 Tera FLOPS peak speed, 16 nodes, **Efficiency** ~70% Linpack, **Operating system**-64 Bit Linux-HPC RHEL V.5.3, **Processor Architecture** - Harper town processor architecture Cluster **Management Suite** - Platform OCS Dell Edition V1.0 (Cluster Management Tools such as Ntop, HPC, Cacti, PCM, OFED, Nagios Ganglia, Lava etc.), **Supported Compilers** - Intel Compiler Cluster Kit, GNU Compiler Collection (G++, G Fortran, G95), **Communication Network** (Primary and Out of Band)-GigaBit Connection through Management & Administrative GigaBit switch Out of Band switch (To connect to the entire NIT Campus), **Accessibility** - either in CCC or anywhere in the NIT campus.

Efficient Economical Cluster Computing: Quad-Core – 'Harpertown Processor' architecture, fully integrated, tested, customizable clusters, industry standard operating environments: workload manager GB Management Performance Optimized Intel math Kernel Libraries.

HPC System Configuration: Head Node, Compute Node, Interconnect, Management Network, Storage, Parallel File System, Software Stack.

Software Stack Components of HPC Solutions: Operating System, Cluster Deployment tools, Node & Cluster Monitoring tools, Network & Node file system, message passing libraries, Application workload manager, Certification tools, support for high speed interconnect, Performance benchmarking tools, Development tools.

Storage & HPC Value Proposition: High Performance Computing, Shared File System, Parallel File System, Storage, Networking & Management Consolidation, Backup & Policy based Archive, De-duplication, Computational continuity & Disaster Recovery Plan, Server & Storage Virtualization, Information Life Cycle Management.

Users: The facility is made open to all faculties in all the departments and schools for their academic, research and consultancy work. Various research and project work on Ph.D and PG students, B.Tech students pursuing computationally intensive projects.

An overview of selected listing of work done by various departments and schools with PURNA:

Mechanical & Production Engineering

- Structured grid problems(Lattice Boltzmann methods)
- Unstructured grid problems(finite element analysis)
- 2-D hydrodynamics simulations
- Molecular nano-technology
- Material property simulations

Nano Technology

- Molecular dynamics

Electrical & Electronics Engineering

- Signal processin

Civil Engineering

- Advanced Structural problems

Computer Science & Mathematics

- Image processing
- Dynamic programming
- Spectral methods (such as Cooley-Tukey Fast Fourier transform)
- Branch and bound methods
- Monte Carlo simulation
- LAPACK++(a library for high performance linear algebra computations)

Physics & Chemistry

- N-body problems (such as Barnes-Hut simulation)
- System 51 isualiz based on Quantum Mechanical Calculations
- Nano physics &Chemistry

Chemical Engineering

- Chemical reaction dynamics
- Schrodinger software suite
- Moe: the molecular operating environment(for chemical computing software development and deployment)

Electronics Engineering Department

- Graph Traversal (such as Sorting algorithms)
- Combinational logic(such as brute-force cryptographic techniques)

Biotechnology

- Gene algorithm solving

User viewed Features

- Optimized libraries of g++, gfortran, Intel® C++ and Intel ® Fortran have been setup. These includes the Intel® Math Kernel Libraries
- Users of PURNA have various choices of Messages Passing Interface (MPI) libraries at their disposal. Open MPI which is preferred MPI of many of the world's fastest duper- computers is available .MPICH and MPICH2 which have been the MPI of choice for parallel data processing in many Universities has also been setup.
- Subroutine libraries that can calculate Discrete Fourier Transform in multiple dimensions such as Fast Fourier Transform in the West 2 (FFTW2) and FFTW3 have been setup in parallel operation mode.

- Quantum – ESPRESSO, a code for calculating electronic and structural properties materials from first principle quantum mechanical calculation has been setup to perform in parallel mode.
- LAMMPS, an open source code for the 51 isualiz of molecular dynamic evolution of Nanoscale systems has been 51 isualiz for peak performance on the cluster, using the g++ and FFTW2 libraries .
- RHEL 5.3 has been updated with the latest updates and various additional features such as NTFS file support was added
- Visual Molecular Dynamic Software was compiled and setup to 51 isualiz the tremendous amount of data generated as part of Molecular Dynamics Simulations
- Users can acces, copy and modify data on their user accounts in PURNA as if it were and external hard disk connected to their system.

Servers

HP Rack Servers-DL 385G5, P2378 BASE HP Servers, Quad Core Dell Power Edge 6600 Quad Processor Xeon Servers, Dell Power Edge 2600 Dual Processor Servers, Sunfire V210.

Server Details:

HP Rack Servers : DL 385G5,P2378 BASE HP Servers, Quad Core AMD Opteron™ Processor 2378 @ 2.4 GHz x 2 Processor, 16 GB RAM, HDD-4 x 300 GB 10k rpm hot plug SPT SAS Drivers on hardware raid controller, 16 GB DDR2-667 with advanced ECC Memory ,32 MB video memory ,Chipset: Server Works HT 2100 North Bridge and HT1 999 Dell Power Edge 6600 Server with Intel Xeon Quad Processor MP-3.00 GHz / 4 MHz FSB 4GB DIMM, 73 GB ultra 320 SCSI HDD, Dell Power Edge 2600 Server with Intel Xeon Dual Processor 3.06 GHz/1MB 266 MHz SDRAM ,73 GB ultra 320 SCSI HDD .

SUN - Fire –V2 10 ULTRA SPARK III

Graphic and Engineering Work stations : HP Work Stations – GK884AV HP XW 4550 Work Stations HPL 1710,TFT Monitor ,AMD Optron 1000 Series Processor @ 2.2 Gz,1 MB L2 Cache ,1Gz AMD Hyper Transport Technology, AMD 690 G with AT1 Radeon, X1250 Chipset BIOS, 4GB DDR2 SDRAM,667MHz ECC Memory, 160 GB SATA, 3GB/S 7200 RPM Drive,16xDVD +RW. This facility is reserved for Computational and Graphic Intensive Work.

Systems

DELL Intel Pentium IV Systems, Core2Duo Processor E6550@2.33 GHz,2GB RAM,240 GB IDE HDD, Graphics card ,Intel Pentium IV PCs, P4 2.8 GHz, 512 MB RAM ,CDRW 52X, 80 GB HDD.

The Systems are connected to the servers through gigabit switches and CAT6 UTP cables .The centre is connected to the campus-networking centre with backbone of 32 Mbps through a Nortel L3 switch and in turn to internet.

UPS, Printers & Other accessories:

UPS The centre is backed by 80 kVA and 30 kVA UPS of DELTA USA and USA makes, PRINTERS HP Laser Jet 5m ,HP Laser Jet 4050 N, HP Deskjet 870 dxi, HP Deskjet 5160,Wipro 1050+DX Dot matrix printer, Epson 24 pin LQ 1050 –DX 136 column dot matrix printer, SCANNER HP Scanjet 4c, CD WRITER HP Plus 7500 series ,Yamaha CD writer(24X),External Drive Enclosure Suitable for DVD-RW & ROM,CD-ROM &RW & 2.5, 3.5 IDE HDD USB 2.0 480 Mbps .

OS & Software

Campus license for all the Microsoft products Operating System RedHat Linux ES, SUN OS (Solaris 7 & 9), Windows 2003 Server, Windows 2000 Professional Comm..Edition, Windows 2000 Server AE, Sco open Server, RedHat Linux 9 Prof Edition – Red Hat Prof Workstation, Windows 2000 Professional Comm. Edition, Suse Linux & Debain Linux, Programming Software /Compilers C, C++, Fortran 77,Fortran 90,Pascal. Java, Anjuta Turbo C++ Suit, Borland C++ Builder, Kylix Professional, Visual Studio 6.0, Microsoft Developer (MSDN),Office software Microsoft Office 2003, Microsoft Front Page, Star Office 7, Word Perfect, GIST ISM Office, Accounting Software TATA E-X Next Generation, Tally silver, File transferring software Cute FTP Pro, GS cute FTP advanced version, Mathematics computing software Mathematica 5.0, CFD/Computational software Matlab 7.3.0, Fluent 6.1.22(100 licenses of Matlab and 20 licenses of Fluent are accessible throughout the campus through intranet),Comsol 3.2,Gambit 2.1.6, Report Creation software Crystal Report 10 Professional Edition, Crystal Enterprise version 10,DBMS, ORACLE workgroup server, ORACLE 9i and 10 G Personal Multimedia Software & Other Coral Draw Graphics Suite 12

,Coral painter, Coral X metal for Developer, Adobe Photoshop CS, Adobe PageMaker 7,Adobe Acrobat Writer, Macro Media Flash MX, Macro Media Dream Weaver, Ulead Video Studio,3D Max 6 Discrete, Painter, GIF Animator, Macro Media of Web Design Studio(Studio MX)etc.

9.1.2 CAMPUS NETWORKING CENTRE

Campus Networking Centre (CNC) of the Institute manages the Internet connectivity (both wired and wireless), web servers and mail server of the Institute. The campus is interconnected with about 25 km of fiber optic backbone network with 56 routed internal networks and a wireless LAN, managed by the Unified Threat Management system. The NITC web server and mail server are high performance, quad core processor servers. The wireless LAN covers the entire campus with IEEE 802.11b/802.11g standards. Presently the network is served by 200 Mbps of Internet connectivity provided by BSNL under the NMEICT scheme of MHRD and 12 Mbps by RELIANCE. All the hostels are served with Internet connectivity through wired mode. The CNC functions on all days on a 24x7 basis.

IP Phones are installed in all academic and administrative sections. The IP Phones and IP Phone servers are also managed by CNC.

Hardware maintenance unit of CNC provides quality level service support that is designed to minimize system downtime in the entire campus. The services include installation and maintenance of computer and peripheral devices, software and operating system installations, and system configuration etc. This unit is also responsible for testing of systems supplied for conformance to stated standards and prior specified user requirements.

9.2 WORKSHOP

CENTRAL WORKSHOP - FACILITIES AND WORKS UNDERTAKEN

The facilities in Central Workshop of Mechanical Engineering Department are effectively utilized for the conduct of practical classes for all students of first year undergraduate course and also by Post graduate students. This section forms a central facility and as such caters to the requirements of all departments. The practical classes are compulsory for both B.Tech. and B.Arch. first year UG students. The primary idea is to impart them with the basic ideas of manufacturing. For the UG students of Mechanical Engineering streams, advanced training in various skills with one semester on the design and fabrication builds up their confidence level in practical fields too. The syllabi too were modified accordingly.

The research works, requiring fabrication, assembly and testing, done in other departments, are carried out in the sections of central workshop. Apart from the regular practical classes, interdepartmental requirements involving fabrication are carried out in central workshop. This centre has ample facilities to undertake consultancy and fabrication works in all manufacturing fields.

The workshop sections are equipped with the following machineries/equipments.

- Centre Lathes– total of 44 nos –HARIHAR, KIRLOSKAR GD2- , MK brand Enterprise 1330, Turnmaster 35- INVESTA, CHAMUNDI HMT LATHE-. and PSG ALL GEARED TYPE141E-
- Shaping Machines- 8 nos- COOPER make, MODGIL make- and BATLIBOI make
- Slotting Machine- 1no. ROSCHER ELCHLERGerman make
- Milling Machines- 3 nos. PRECISION type, BS- PEDERSEN make, HMT Vertical type
- Radial Drilling Machines- 2 nos- BATLIBOI, VRZ grade 1, EIFCO model
- Drilling Machine- 4nos. DAULAT, PRAGA ½” CAPACITY, ½ HP, 3 Phase., WOLF make, WOLF HEAVY DUTY 1 ¼”
- Tool & Cutter Grinder- ADDISONS
- Tool Post Grinder- MPD H08
- Band Saw Machine– 1 no. LAXONS.
- Kirloskar Hack Saw Machine- 9” capacity
- Band Saw and Circular Saw Blade Sharpening Machine- ITALIAN MODEL
- Wolf Portable Grinder
- Precision Lathe Tool GrinderWOLF, G23

- Bench buffing machine- ROHIT
- Arc Welding equipment- TRANSFORMERS – 5nos. STROJEX (Czechoslovakian) – Trydyn K-320 and MALIK make
- Rectifier_ 1 Kirloskar make 400 amps
- Portable Arc welding transformer- ELECTROWELD
- Gas welding equipment- Swiss make standard set
- Gas tungsten / metal arc welding setup- ADVANI-OERLIKON- THYROTIG
- Submerged arc welding outfit with flux drying oven - Advani Oerlikon
- Portable Flame cutting machine- ADOR MAKE
- ADOR make RANGER 400-B MIG WELDING SET UP
- ADOR make AP –100 Air plasma Cutting machine with circle and line master
- Spot welding machine- Advani Oerlikon, pedal operated
- Bench Grinder- 7 Nos double ended, with wheels
- PROTECH flexible shaft grinder- 2 Nos.
- All tools for fitting operations
- All carpentry tools
- BOSCH make power operated tools for carpentry, sheet metal and fitting works
- Air compressor. KAC Brand, 55 litre tank capacity, complete set- 2 nos.
- Metal cutting band saw
- Wood cutting band saw machine
- Wood working lathes, MYFORD ML-8 OF 4' make- 3 nos
- Universal wood working machine
- American model JIG saw machine- SPRUNGER J200 with accessories
- Belt & disc sander- BD-2.
- Circular saw
- Universal edge bending and folding machine- International make, for 4" dia tube
- Shearing machine- GULLIOTINE Power operated model UCG/48, to cut 3.2 mm 1220 wide sheets
- Shearing machine-
 - Samson English make- 14" blade, cutting size 1/8", with handle
 - Portable Electric Shear
- Riveting Machine
- Fly Press- Pillar type, MASTER
- Hydraulic Pipe Bending Machine- HYDROBRAND, 1" to 3"
- Spray-painting unit cylinder 1, stage, IMPERIAL
- Hand Operated Circle Cutting Machine
- Edge Folding Machine Type REF Indian make, 36" X 24
- Power hammer. 65 kg, National Small Ind. Corpn, New Delhi
- Pneumatic Forging Power Hammer NSE make
- Bar Cropping & Shearing Machine Russian make
- Conduit pipe bending Machine- METALEX, , hand operated
- Shell molding machine- Model 1218M, shell sand coating plant of capacity 10 kg.
- Shell testing equipment - Model VHH digital temperature Indicator, tester.
- Oil fired tilting Furnace- Sklener Crusibleless 200 lbs capacity
- Oil Preheater 1.5 KV capacity. Type GGOP 1.5
- Resistance furnace. Hindustan Furnace, capacity 10 kg, ammeter, voltmeter etc.
- Hand Molding MACHINE- P.F.M. with hand operated head.
- Vibrating table for foundry works- 1 NO
- Metallic and ceramic moulds for castings
- Diesel generator. RUSTAM model, 30KVA
- GODREJ heavy-duty workbench with fittings.
- Air Blowers, Parsha 5 HP & 3 HP
- Swage block CI, 18X18X6"-6 nos.
- Surface plates- 2 Nos
- Marking off table- 3X3
- Platform Trolley
- Crane, Chain pulley block

9.3. EDUCATIONAL TECHNOLOGY & LIBRARY

Educational Technology & Library (ETL) presently comprises of Central Library and Digital Library. Both the Library & Digital Library are working from 8 a.m to 11 p.m on all days except Sundays and Public Holidays.

9.3.1 CENTRAL LIBRARY

CENTRAL LIBRARY offers its services to about 5000 users comprising of undergraduate, post graduate students, research scholars, faculty and Supporting Staff from various Departments of the Institute/Centres/Sections. The Library uses LIBSYS Software version 7.0 for its operations. Collection is fully bar coded and offers Web OPAC service throughout the Campus LAN.

Current Print Holdings:-

(a) Print Books

Sl. No.	Category	Books at the end of the year 2011-12	Books added during the year 2012-13	Total books as on March 2013
1.	General books	108110	1857	109967
2.	Books for SC/ST	12773	5	12778
3.	Reference books	5831	70	5901
	Total	126714	1932	128646

(b) Print Journals / Magazines/ Dailies

Category	Print Journals/Magazines/Dailies at the end of the year 2011-12	Print Journals/Magazines/Dailies added during the year 2012-13	Total Print Journals/Magazines/Dailies as on March 2013
National	98	01	99
International(P + O)	268 + Science Direct 5 Sub. Collection	Nil	175 + Science Direct 5 Sub. Collection
Dailies+ Weekly	17	Nil	17
Total	401	01	291

9.3.2. DIGITAL LIBRARY

NALANDA, the Digital Library is one of the largest digital libraries in the country. Nalanda serves members of the campus in meeting their academic & research needs by providing timely and up-to-date information with value added services in all the areas of Science/Engineering/Technology. Apart from the Digital Library Reading Room, members can access the Nalanda from the entire campus.

Current Alexa Rank of NALANDA Digital Library shows 231,228, which is the highest among NITs'.

E-Resources-subscription

Category	Additions during the year 2011-12	Total as on March 2012
Online e-Journals (through INDEST consortia)	-	2,941
E-books	-	63,552
E-Journals	-	4,077
E-Databases (EI-Village 2, Indian Standards, ASTM etc)	-	14,955
NITC Resources (Faculty reports, Students' thesis, Course notes)	67	47,021
Journal Back volumes	-	14,411
Total		146957

Major Hardware / Facilities of Digital Library
 HP Storage server DL 3800
 Wipro NET Power z2215
 3 Dual Xeon processor Compaq servers (Proliant ML 350 G4)
 Dual Pentium Processor Compaq Server (Proliant ML 350 G2)
 2 Quad – core Intel Xeon Processor HP (Proliant DL 350 G5)
 2 Xeon Processor Workstation (HP XW 8200)
 69 Pentium IV Microsoft Windows XP client machines.
 14 Core™ 2duo Microsoft Windows XP client machine
 Sonic WALL NSA 3500 Firewall
 HP 6730 Note Book Computer
 Canon make A3 Color Scanner, Nikon cool pix 5700 Digitak Camera,
 Datamax Barcode Printer, 2 KVM Switch.
 30KVA APLAB UPS
 5 Cisco SRS 2024 switches

9.3.3 EDUSERVER

This will provide facility for faculty to offer common and additional on line topics/subjects as the part of the curriculum including on-line tutorials, evaluation and simulation etc.
 List of courses offered by the Edu server during the Winter semester 2011-12.

EE6494	Seminar
EE6492	Mini Project
EE6204	Digital Protection of Power Systems
EE6404	Industrial Load Modelling & Control
EE6402	Process Control & Automation
CE 351	Prestressed Concrete
CE6134	Engineering Fracture Mechanics
ECU209	Electromagnetic Field Theory
CE 200	1 Mechanics of Solids

9.3.4 Programmes organized by ETL during 2011-12

- Awareness Program on “Web of Science” organized on 07th March 2012
- Awareness Program on “SCOPUS” organized on 13th March 2012

Staff position

Chairman (ETL)	: Dr. Gulam Jilani
Vice Chairman(ETL)	: Dr. R Manu
Librarian (Gr.I)	: Vacant
Librarian (Gr.II)	: Vacant

Supporting Library Staff:

Sweety Mathew	Librarian Gr.III (Librarian In – charge)
P.S Lalithakumari	Librarian Gr IV
C G Balachandran Nair	Librarian Gr IV
J Sobhana	Librarian Gr IV
T. Jayarajan	Librarian Gr IV
C Latha	Librarian Gr IV
K P shaju	Librarian Gr IV
M K Chandramohan	Graphic Artist
K Jayaraman	Offset Machine Operator
K C Bishnu Bahadur	Library Attender
C. P Balan	Library Attender

9.3.5 Supporting office staff

Savitri C	Peon
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Project Digital Library Technical Assistant	: 0
Project Digital Library Computer Assistant	: 3
Library Contract Staff	: 7
Library Helper	: 3
Office Assistant	: 1

9.4 LABORATORIES DEPARTMENT OF ARCHITECTURE

Sl. No	Name of the Lab	Available Area Size m ² .	Maximum Batch size	Weekly Hours Required as per Curricula	No. of experiments	
					Prescribed	Conducted
1	Building Science Lab	228	6 batches x 7 students=42	4	12	12
2	CADD Lab	175	50 individual	3	3	3
3.	Creative Arts Lab	228	50 individual	4	12	12
4.	IMD Lab	175	40 individual	3		

DEPARTMENT OF CIVIL ENGINEERING

- Transportation Engineering Lab
- Structural Engineering Lab
- Concrete Lab
- Strength of Materials Lab.
- Geotechnical Engineering Lab.
- Survey Lab.
- Offshore Structures Lab
- Water Resources Engineering Lab
- Environmental Engineering Lab
- CAD Lab

Assets / Equipment Acquired: Nil

DEPARTMENT OF COMPUTER SCIENCE & ENGINEERING

I. Software Systems Laboratory

This lab was established in 2006. The objective of this laboratory is to provide the infrastructure for conducting the regular labs (Data Structures Lab, DBMS Lab, Network Lab, Compiler Lab, OS Lab and Programming Languages Lab) and project works for the BTech Programme. The lab is equipped with state of the art servers, desktops, and software (Linux and compilers for C, C++, Fortran, Perl, TCL, PHP, ASP, Ruby, ADA, Java, Python, Pascal, Nasm, etc.).

Faculty in charge : Mr. K. Muralikrishnan

Major Equipments:

Dell brand 16 node HPC cluster

Dell Optiplex GX 520nSFF Desktops – 75 Numbers

Specifications: PIV 630 (3 G.Hz, 2 MB L2, 800 MHz FSB) / 512MB DDR2 533MHz SDRAM /80GB SATA HDD / CDRW DVD Combo Drive / 17" Flat panel LCD monitor / Integrated Gigabit Ethernet Card / Keyboard / Optical USB mouse / SFF BTX cabinet

Dell Power Edge SC1420 servers – 2 Numbers

Specification: Dual Intel Xeon processors with EM64T support (3 G.Hz, 2 MB L2, 800 MHz FSB) / 2GB DDR2 400MHz ECC Memory / 2 x 80GB SATA HDD / CDRW DVD Combo Drive / 19" Flat CRT monitor / Integrated Dual Gigabit Ethernet / Keyboard / Mouse / ATX cabinet Liebert

Dell Power edge 2950 server

Specification: processor 2 *Quad-Core Intel (R) Xeon (r) E5 430,2x6MB Cache .2.66 GHz(from net) ,Chipset Intel 5000x or Higher Front Side Bus 1333MHz FSB ,RAM 8 GB (4x2048), DDR-2 667 MHz ECC 2R Fully-Buffered Memory ,Hard Disk Drive 4x146 GB 3.5 inch 15 K RPM SAS HDD,Integrated Controller Card for 3.5"x6 Hard drive, C\$: Raid 5PER6/I or PERC5/I Integrated ,Optical Drive 8x SATA slim DVD+/-RW ,Video Embedded ATI ES 1000 with 16 MB memory ,Accessory Slots , Three PCI slots, either PCIe riser with three PCI Express slots (one x4 (x8 connector) and two x8) or two PCI-x 64-bit/133Mhz and one PCI express x8 slots 4port SAS5/I integrated SAScontroller (no RAID) ,Integrated LAN Integrated Dual Broadcom Gigabit Network Card wit 6 h TOE hardware enabled, Broadcom Jetstream 5708x4 PCIe Single Port Copper GbE NIC w /TOE ,IO Ports 2 serial, keyboard, mouse, 2VGA, 2Graphics, 5USB 2.0 ports 1 remote management port, 3 net work RJ45

Dell Optiplex 755

Intel core 2 Duo 2.20 GHz 800 MHz front Side Bus 2MB L2 Cache,2gb ddr2667MHz, 250Gb serial ATA, DVD-ROM/CD-RW Combination Drive,Dell 1707Fp Flat Panel Monitor,1seial ,1 parallel and 4 USB2.0 Ports Two in Front,Dual gigabit Ethernet Integrated dell multimedia usb keyboard,dell 2 button with scroll usb mouse, ATX supply, embedded intel gigabit Network controller, Linux os

20KVA UPS – 1 No.

Features:

- Browsing facility provided for students
- Supports client server application development in the following areas:
 - Systems Programming
 - Linux kernel programming and Operating System development
 - Compiler development
- Networking: Linux, TCP/IP and RPC
- Database: Postgress SQL
- Fully Air-conditioned

(ii) Hardware & Embedded Systems Laboratory

This lab was established in 2006. The objective of this laboratory is to provide the infrastructure for conducting the regular labs (Hardware Lab) and project works for the B.Tech. and MCA Programmes.

Faculty in charge : Mr. Saidalavi Kalady

Major Equipments:

Function Generator: 16 Nos, CRO: 16 Nos

Digital Trainer kit 15 Nos.

Multiple output DC Power Supply: 16 Nos.,

Digital Multimeter (5 Nos)

IC Tester: 2 Nos., P4/1.6 MHz Computer: 20 Nos,

LAN-T LAN Trainer: 1 Nos.

Dell Optiplex GX 520nSFF Desktops – 5 Numbers

Specifications: PIV 630 (3 G.Hz, 2 MB L2, 800 MHz FSB) / 512MB DDR2 533MHz SDRAM / 80GB SATA HDD / CDRW DVD Combo Drive / 17" Flat panel LCD monitor / Integrated Gigabit Ethernet Card / Keyboard / Optical USB mouse / SFF BTX cabinet

XENITICS Desktop

Specifications: PIV (2.8 G.Hz) / 512MB RAM / 40GB SATA HDD / CDR / 17" CRT monitor / Integrated Gigabit Ethernet Card / Keyboard / mouse / ATX cabinet

Features:

This lab is equipped with all necessary facilities to impart state-of-the-art training to the students in the following areas:

- Microprocessors
- Hardware and Interfacing
- PC assembling and trouble shooting
- Digital Electronics
- Fully Air conditioned

iii) Network Systems Laboratory

This lab was established in 2006. The objective of this laboratory is to provide the infrastructure for conducting the regular labs (Programming Lab, Data Structures Lab, DBMS Lab and Compiler Lab) and project works for the MCA Programme. This lab caters to regular laboratory and project requirements of both B.Tech and MCA students of the department. The desktops and Servers of the laboratory are installed with fedora 8 Operating Systems.

Faculty in charge : Mr. Jayaraj P B

Major Equipments:

1. Server Machine (2 Nos.):

Dell PowerEdge SC1420 Server. (with Keyboard & PS/2 Mouse)

2. Dell Desktops: (70 Nos):

Machine Model	Optiplex 520	Quantity	Optiplex 520 with Wi-Fi card	Quantity	Optiplex 755	Quantity
Processor	PIV 2.8	53 Nos.	PIV 2.8	7 Nos.	Core 2 Duo	11 Nos.
HDD	80GB	53 Nos.	80GB	7 Nos.	250GB	11 Nos.
RAM	512MB	53 Nos.	512MB	7 Nos.	2GB	11 Nos.
Disk Drives	CD/DVD Combo	53 Nos.	CD/DVD Combo	7 Nos.	CD/DVD Combo	11 Nos.
Floppy Drive	3.5 inch	53 Nos.	3.5 inch	7 Nos.		
Keyboard	DELL(usb)	53 Nos.	DELL (usb)	7 Nos.	DELL (usb)	11 Nos.
Mouse	DELL optical (usb)	53 Nos.	DELL optical (usb)	7 Nos.	DELL optical (usb)	11 Nos.
Monitor	LCD 17"	58 Nos.	LCD 17"	2 Nos.	LCD 17"	11 Nos.
Wi-Fi NIC			Cisco Linksys 54Mbps	7 Nos.		

3. Xenitis Desktop:(1No)

One processor – PIV, HDD 40GB SATA, RAM 512Mb, CDDrive – CDROM, Floppy Drive – 3.5 Inch, Keyboard – 101 Mechanical, Mouse – Xenitis (optical scroll), Monitor CRT 17", 2 NIC card – 10/100 Ethernet

4. Dell Precision Workstation: (1 No)

One processor - Dual-core Intel® Core™ 2 Duo with 1066MHz FSB, 4MB L2 Cache, XD, VT, EIST, HDD 250GB SATA, RAM 4GB, DVD-RW, Keyboard (Multimedia 130 keys), optical mouse, N-vidia graphics card. 1Gbps Ethernet card

5. Dell PowerEdge 1950:(1 No)

One processor – intel xeon quad-core, RAM – 4GB, HDD 500GB(SATA, RAID, SAS),DVD combo drive, Keyboard (Multimedia 130 keys), optical mouse, 2 NICs 1GBps

Features:

- Round-the-clock Internet facility with bandwidth 20 Mbps (shared)
- All the modern softwares and tools available
- Fully Air conditioned

(iv) Image Processing & Multimedia Laboratory

Established in 2006 as part of research projects in Image Processing. This lab is currently being utilized by the first year M.Tech students of the department for their project and course activities.

Faculty in charge: Ms. Subhasree M, Ms Pournami P. N

Major Equipments:

Dell 760 Desktops (250 GB HDD, 2 GB RAM) - 18 Nos.

Image processing workstation with image grabbing card and image processing software, IDL, MatLab
Canon N640Pex colour flatbed scanner (600 X 1200 dpi, 42 bit input)

Logitech Scanman hand-held scanner

Sony Handycam dcrPC-109 digital mini camcorder (10x optical, 120x digital zoom, 1.07 mega pixels)

Toshiba PocketPC (128MB, 32MB flash memory, 512MB CF card)

PULiNX TMC-76 digital camera with Fujinon TV zoom lens (1:12/12.5-75) and tripod
19" Electrohome colour monitor with RF input
Akai VS-F220 VHS video cassette recorder, HP LaserJet laser printer
PC running Windows XP (PIV, 512MB, Asus V9520 128MB AGP, LifeView WDM TV tuner, CD-RW)
Apple PowerMac G4 (G4 1Ghz, 256MB, MacOS X)
Two Apple eMacs(G4 1Ghz,128MB,MacOS X), Apple iBook(G3 800Mhz,128MB,MacOS X)

Features:

- This lab has an Apple Airport Extreme base-station, which provides wireless connectivity to the Computer Engineering Department
- Round-the-clock Internet connectivity with bandwidth 20 Mbps (shared)

(v) Computational Intelligence Lab

Established in 2003 as part of a project "Centre for Speech and Natural Language Processing," with a view to promote research activities in areas like Artificial Intelligence, Bioinformatics, Natural Language Processing, Knowledge Based Systems and Information Retrieval. This lab is currently being utilized by the M.Tech students of the department for their project and research activities. The lab is equipped with state of the art computing facilities with seamless wired and wireless Internet connectivity, and is functioning round-the-clock with student assistance.

Faculty in charge: Mr. K A Abdul Nazeer

Major Equipments:

Server: 1 No.

DELL PowerEdge SC1420

Dual Intel Xeon Processors with EM64 support
3.0 GHz, 800FSB, 2 MB L2 Cache
2 GB RAM DDR2 400 MHz ECC Memory
2 x 80 GB 7200 rpm SATA
DVD ROM CD-RW Combination Drive
19 inch FLAT CRT Monitor
ATI XL Graphics Controller 8MB video memory

Dell OPTIPLEX 520 (20 Nos)

3.0 GHz, 915 Intel original motherboard
512 MB DDR, 80 GB SATA HDD
17" FLAT Color Monitor
16x DVD ROM

Dell OPTIPLEX 755 (11 Nos)

Intel Core2 Duo, E6550 @ 2.33 GHz
1 GB DDR, 250 GB SATA HDD
17" FLAT Colour Monitor
16x CD RW/DV

10 KVA UPS: 1 No.

(Vi) Secure Computing Laboratory

This lab was established in 2005. The objective of this laboratory is to provide the infrastructure for research in various aspects of security in computing. The research scholars are the main users of this lab. The lab is equipped with state of the art machines and software.

Faculty in charge: Dr. Priya Chandran

Major Equipments:

Server Rack

1. HP ProLiant DL 360 4p Server
2. Cisco 2800 Series Router
3. Cisco Catalyst 3560 G Series 24 port Switch
4. Master View plus KVM Switch CS 9138
5. Procurve Networking 24 Port Switch
6. HP L1766 Monitor

Servers

1. Sun Blade 1500 (2 Nos)
2. Dell Power Edge SC1420 (1 No.)

Work Stations

1. Dell Precision T 3400

Desktops

1. Dell Optiplux GX 520 (6 Nos)
2. HP Compaq (1 No.)
3. Apple M8570 (1 No.)

Laptop

1. HP Compaq nx6130 (1 No.)

Printer

1. Wipro LQ 1050 DX (1 NO)

Wireless Access Point

1. D-Link DWL 2100 AP (1 No.)

- **Direct Internet connectivity through campus network.**

vii) Bio-Computing Research Laboratory

This laboratory was established in 2009 with an objective of fostering research in the emerging area of Bioinformatics and Computational Biology. Equipped with a Dell brand 16 node HPC cluster, this facility currently caters to the requirements of the research and graduate students working in the area. The department has a long term objective of developing this into a 'Centre of Excellence in Biocomputing' with collaboration from institutes of national and international repute.

Faculty in charge: Mr. K A Abdul Nazeer

Major Equipments:

Dell brand 16 node HPC cluster

Dell 760 Desktops (250 GB HDD, 2 GB RAM) - 2 Nos.

10 KVA UPS: 1 No.

Features:

- Functioning on a 24 X 7 X 365 basis with support from the PG students.
- Round the clock Internet facility (both wired and wireless) with bandwidth 20 Mbps (shared)

viii) Cloud Computing Laboratory

Cloud Computing is emerging rapidly as the new computing paradigm of the coming decade. Cloud computing offers a viable solution to the problem of addressing scalability and availability concerns for large scale applications. The concept has evolved over the years starting from data centers to present day infrastructure virtualization. Cloud computing as envisaged today covers all walks of computing . In Computer Science & Engineering discipline, cloud computing is having significant impact and influence in the key areas like Software Engineering, Operating Systems, Computer Architecture, Programming and Web engineering.

We plan to offer specialized courses in this area both at UG and PG levels and take research scholars to work in this area. A state of the art lab for cloud computing can attract potential industry sponsored R&D projects and consultancy projects.

Benefits:

- UG & PG Students will exposure and opportunity to work in this emerging area
- Can play a crucial role in attracting industry sponsored projects and consultancy projects
- Can play a vital role in arriving at collaborations with foreign universities and IITs for intensive research in the area of cloud computing

Faculty in charge: Dr. S.D. Madhukumar

ix) Web Streaming & Multimedia Laboratory

Web streaming and multimedia are active topics of research interest among computer scientists and application developers in the present day, and its relevance and prevalence is going to be increase manifold in the coming years. We envisage to set up a full-fledged studio, where the algorithms and programs for web streaming can be tested realistically. Video conferencing equipment is an essential requisite in such a laboratory, as video conferencing is one of the most popular applications of web streaming and multimedia, highly relevant to the academic community.

The lab and equipment will be highly useful to the PG Students of the department as a laboratory which can be used for projects on streaming, multimedia.

Faculty can have their courses video recorded and such contents are going to help a department like ours much better. They can use it as a solution to problem of handling very large classes, where expert lectures can be delivered to a very large group and tutorials handled by TAs for smaller groups. Faculty may be required to be present only for doubt clarification and so on. Expert talks from researchers and eminent faculty elsewhere can also be arranged with reduced costs. Faculty and research can do result oriented, practically relevant research on streaming, multimedia, etc. There is an immense scope for consultancies with this infrastructure and expertise.

Faculty in Charge : Mr. G. Gopakumar

DEPARTMENT OF ELECTRICAL ENGINEERING

UG Laboratories:

Electrical Machines Laboratory, Electrical Measurements Laboratory Control Systems Laboratory, Electronics Circuits Laboratory, Electrical Workshop and Electronics Workshop

PG and Research Laboratories:

Electrical Simulation Laboratory, Power System Laboratory, Power Electronics Laboratory, Industrial Power & Automation Laboratory, Embedded System Application Lab, DCS Applications Lab, Process Automation Lab, Distributed Energy Research Lab, Bio Medical Lab.

DEPARTMENT OF ELECTRONICS & COMMUNICATION ENGINEERING

1. Electronics Circuits Lab
2. Communication Engineering Lab
3. Integrated Circuits Lab
4. Digital Signal Processing Lab
5. Embedded Systems Lab
6. VLSI & Microelectronics Lab
7. Telecommunication Technologies Lab
8. Electronics Workshop
9. PSoC Lab
10. Signal Processing and Communication (SPCom) Lab
11. DST FIST Lab
12. Simulation Lab

DEPARTMENT OF MECHANICAL ENGINEERING

Sl. No.	Name of laboratory
1	Metrology Lab
2	Industrial Engineering Lab
3	Production Engineering Lab
4	Heat Engines Lab
5	Thermal Science Lab
6	Vibration, Acoustics & Tribology Lab
7	Fluid Mechanics and Fluid Machinery Lab
8	Solar Energy Centre
9	Mechatronics and Robotics Lab
10	CAD/CAM Lab
11	Computer Aided Graphics & Design Lab
12	Material Sciences Lab
13	Advanced Manufacturing Centre
14	Sophisticated Instruments Centre

DEPARTMENT OF MATHEMATICS

1. Scientific Computing Lab for PG
2. Soft Computing Research Lab

DEPARTMENT OF CHEMISTRY

Sl.No.	Name of Laboratory
1.	B.Tech Laboratory-I & -II
2.	PG Physical Chemistry Laboratory
3.	PG Instrumentation Laboratory
4.	PG Polymer Laboratory
5.	Sophisticated Instrumentation Laboratory (with DSC, TGA, FTIR etc.)
6.	Computational laboratory (Common facility)
7.	Polymer Science & Technology Research Laboratory
8.	Soft Materials Research Laboratory
9.	Materials Research Laboratory

10.	Bio-organic Research Laboratory
11.	Bio-inorganic Materials Research Laboratory
12.	Inorganic and Bioinorganic Research Laboratory
13.	Theoretical and Computational Chemistry Research Laboratory

DEPARTMENT OF PHYSICS

B.Tech I year Physics Lab
 B.Tech EP General Physics Lab
 B.Tech EP Electronics Lab
 B.Tech EP Solid State Physics Lab
 M.Sc (Tech) General Physics Lab
 M.Sc (Tech) Electronics Lab
 M.Sc (Tech) Optics Lab

Computer Centre & Computational Lab
 Critical Point Phenomena & Polymer Dynamics Lab
 Unconventional Electronics and Photonics Lab
 Laser and nonlinear optics Lab
 Computational Materials Science Lab
 Applied Optics and Instrumentation Lab
 Organic and Nano electronics laboratory
 Photonic Materials and Devices Laboratory

} Research Labs

DEPARTMENT OF CHEMICAL ENGINEERING

1. Heat Transfer Lab
2. Mass transfer Lab
3. Fluid Mechanics Lab
4. Mechanical Operations Lab
5. Chemical Reaction Engineering Lab
6. Process Control Lab
7. Chemical Technology Lab
8. Environmental Lab
9. Computer Lab
10. Project Lab
11. Research Lab

SCHOOL OF BIOTECHNOLOGY

a) B. Tech Laboratories

1. Biochemistry Laboratory
2. Microbiology Laboratory
3. Bioprocess Laboratory
4. Molecular Biology Laboratory
5. Immunology Laboratory
6. Bioinformatics Laboratory
7. Plant Biotechnology and Enzyme Kinetics Laboratory

SCHOOL OF NANO SCIENCE & TECHNOLOGY

Sl. No.	Name of laboratory
1	Nanotechnology Research Laboratory
2	Nanoscience Research Laboratory
3	Fuels and Combustion Research Laboratory
4	Computational Nanotechnology Lab
5	Nano Display Laboratory

6	PG Laboratory
Sl. No.	Name of Centre
1	SEM/AFM centre

9.5 HOSPITAL, POST OFFICE, SHOPPING CENTRE

HOSPITAL

The institute has a Health Centre Providing the medical needs of students, staff and their families.

1. Dr.Celine. A .A is working as Resident Medical officer.
2. An additional R.M.O, Dr. Abdul Rahman K was appointed on cotract basis from October 2012 to December 2012 and Dr. Rakesh from January 2013 onwards.
3. Dr. Balasubramanian MD was appointed in the Health centre on contract basis on every Wednesday 3.00pm to 5.00pm

4. Paramedical Staff

- a) Mrs. Rosamma V J -Staff Nurse
- b) Mr. Abraham P -Pharmacist

Adhoc Staff

- a) Staff Nurse - 1
 - b) Lab Technician - 1
 - c) Nursing Assistant cum Attender - 1
5. NIT Health centre Medical laboratory.
A newly constructed well equipped Medical Laboratory is functioning in the Health Centre from 2007 onwards.

POST OFFICE

There is a branch of State Bank of India, a Post and Telegraph Office and a Telephone Exchange functioning in the Institute Campus

SHOPPING CENTRE

There is also a shopping centre run by the co-operative society of the employees of the institute staff functioning in the Campus.

9.6 PHYSICAL FACILITIES (GAMES & SPORTS)

Facilities which were ready for use by students :

Foot ball field - 1, Hockey field -1, Synthetic tennis court -1, Swimming pool, Gymnasium, Floodlit Basket ball court - 1, Cricket Concrete wicket with out net -1, Badminton courts -3 & Table Tennis facilities -4 in Auditorium.

9.7 OTHER FACILITIES

9.7.1 CENTRE FOR BIO-MECHANICS

The Centre for Biomechanics, inaugurated on September 10, 1998, is a unique centre in which active and useful academic interactions take place between doctors and engineers. Such centres, although essential for the benefit of society, unfortunately is not common in our country. R & D work of an interdisciplinary nature is carried out here, with Faculty drawn from various departments of this Institute and Adjunct Faculty from other institutions.

I PROPOSED PLAN FOR RESEARCH

1. It is proposed to strengthen the Research interactions with the Department of Physical Medicine and Rehabilitation and the Department of Orthopaedics, Calicut Medical College. Development of improved external fixators, artificial limbs and braces using new materials and new technology is being envisaged. A few new project proposals are being prepared to initiate these works.
2. Interactions with the Dental College of the Calicut Medical College which was initiated a few years ago will be continued. A few postgraduate students from Dental College used the computer

interfaced universal testing machine of the Centre for carrying out tests on dental filling materials and the glue used in dental repair.

3. It proposed to set-up Gait Analysis Lab. in the Department. Ph. D research have been initiated in this direction.
4. It is planned to conduct a few workshops, short term faculty development programme etc in the area of Bio-Mechanics, with an idea of having more interations with other Departments of the Institute and with neighbouring Institutes.

II OTHER FACILITIES

Using the funds from Ministry of Human Resource Development, Thrust Area, (letter of sanction no. F.27-2/2000-TS-I, dated 20-03-98), a high precision, computer controlled, Universal Testing Machine was imported for a total cost of Rs. 12 lakhs.

III NOTABLE ACHIEVEMENTS

A) PAST ACHIEVEMENTS

1. VDS Fixator: Such a configuration, arrived at by elaborate finite element analysis, has proved to be superior to the existing ones. Clinical trials support the conclusions arrived at by detailed parametric study conducted on the computer. This invention has lead to a patent (India Patent No. 194925).
2. Dynamic Wrist Fixator: The new and improved dynamic wrist fixator aimed to solve the problem of healing unstable fractures of the wrist, with nearly complete recovery of the original mobility of the wrist joint. Multi-centred clinical trials were carried out at a number of medical college hospitals in Kerala and the device is proven to be superior to the existing ones available in the market. This invention also has lead to a patent (India Patent No. 196326).
3. Extensive finite element analyses were carried out on Ilizarov fixator used for correcting tibial fractures and in bone-lengthening procedures. Results of parametric studies gives doctors directions on how to use them more effectively.
4. Dermotaxis: This is a term coined to describe a simple and innovative method of achieving closure of skin defects and wounds through continual stretching of the skin. The Centre has developed a tool for skin closure using K-wires, which seems to be a cost effective and quicker method, compared to conventional procedures. It also has the advantage of retaining the sensation of skin in contrast to the conventional methods where it is lost. A viscoelastic model was used to study the behaviour of human skin the results from which indicates the rate at which the skin could be stretched without inducing separation of epidermis.
5. Methods to assess the goodness of healing of a fractured wrist were developed. Certain statistical methods were developed to estimate the gripping strength of the wrist before fracture from measurements of gripping strength of the other (unbroken) hand.
6. Pinch-Force Meter: A simple device to measure the pinch force has been developed. This device is useful in assessing how good the healing of a wrist injury is. A person with a wrist injury usually loses ability to exert much of pinch force.
7. Simple device to measure the viscosity of blood was fabricated. The blood viscosity measure is an easy indicator for several diseases including heart attack.
8. Simple device to prepare a blood smear has been developed. Some more studies are necessary before it can be commercialised.
9. A surgical tourniquet has been developed as part of an M.Tech project work. It is possible now, with this experience, to design a fully automatic programmable digital electronic tourniquet. Tourniquet is useful for the bloodless operation of limbs.
10. Use of LTPP in Prostheses and Orthoses: Low-temperature thermoplastics (LTPP) are extremely useful in developing orthoses such as braces. The advantage comes from the special property of LTPP that it becomes malleable at a temperature of 70° C and hardens when cooled to room temperature. Thus, it can be moulded by pressing against the patient's body. This enables doctors to provide the orthoses to the patients in the quickest possible time resulting in a faster cure of the disability. Trials carried out have demonstrated that it is possible to use LTPP in a variety of situations including the fabrication of sockets of artificial limbs. A research project funded by DST has been completed which benefited a large number of patients visiting the Physical Medicine and Rehabilitation Centre of Calicut Medical College. DST has sent a letter of appreciation regarding this work. It is planned to extend and propagate this work so that more patients from different parts of the country are able to draw the benefits from this work. This work is being extended so that complete prostheses could be made out of LTPP. This will enable the patients to get the prostheses with very little waiting.

11. Several tests on glues and appliances used by the dentists were carried out by postgraduate dental students. This formed part of a few postgraduate theses by students from different Medical Colleges in and around the state of Kerala.

Patents

Tibial External Fixator Assembly—A new biomechanical configuration for improved treatment of fractures of the tibia

Dynamic Wrist Fixator—A new biomechanical device to facilitate treatment of unstable fractures of the distal radius (wrist)

9.7.2 CENTRE FOR TESTING & CERTIFICATION – CTC

The centre for testing and certification was established in 1999 with financial assistance from Ministry of Industries & Commerce, Government of Kerala. The centre was established in mainly to help small scale entrepreneurs of the State of Kerala. Variety of testing equipments has been acquired for facilitating testing of electronic components, systems and gadgets.

Faculty in Charge : Dr.K.S.Sivanandan

9.7.3 ENGINEERING UNIT FOR CIVIL AND ELECTRICAL WORKS

The status of works as on 31.03.2013

Sl. No	Name of the Building	Present Stage
1	Construction of building for Central Library	90 % Completed (Sub judice)
2	Mega Hostel - I	69 % Completed
3	Construction of 100 Nos. Residential Quarters	Completed (By CPWD)
4	Construction of 500 Unit Single bedded Ladies Hostel	98 % (By CPWD)
	Construction of building for Classroom MBA Block Hostel Block Auditorium	By CPWD 99 % 90 % 62 % 90 %
6	Construction of 1500 Rooms Mega Hostel -II	By CPWD.Work started

Renovation/Repair of Institute Buildings, Staff Quarters & Hostels and Renovation/Modification of Electrical Installations were also carried out. Renovation of staff quarters were entrusted to CPWD.

9.7.4. CAMPUS SCHOOL

Spring Valley School

Spring Valley School is a Senior Secondary Co-educational English Medium School functioning in the institute campus as one of the staff welfare measures, and was started functioning in 1991. The school is affiliated to the Central Board of Secondary Education, New Delhi with code No.930100. School is being managed by REC SPECTRA (Society for Promotion of Educational, Cultural and Training Activities), a charitable society registered under the Societies' Act (1860), the members of which are the faculty members of the institute. Most of the infrastructure facilities of the school like land, buildings, laboratories and playground etc. have been made available by the institute. The School has excelled in academics, could present its 17th batch of class 10th and 15th batch of class XII students for the Board Examinations in March 2013 and could achieve 100% pass both in Class X and XII. Digitally enabled classroom facilities and the School Band have been provided to strengthen the academic and co-scholastic abilities of the students. Apart from the formal academics, the students have participated and excelled in CBSE Kalotsav 2013(Zonal Youth Festival), conducted by the Sahodaya School Complex, Malabar Region and participated State CBSE Kalotsav. One Student got first prize and another student got third prize. The 14th issue of School Magazine "SIGNET" was released during the Annual Day Celebrations on 10th January 2014.

Office Bearers as on 31.03.2013

- ⊙ Dr.M.N. Bandyopadhyay, Chairman, REC SPECTRA
- ⊙ Dr.Abraham T Mathew, Vice Chairman, REC SPECTRA & President, School Managing Committee.
- ⊙ Dr. K. Chandrasekharan, Secretary, REC SPECTRA & Manager cum Correspondent, Spring Valley School.
- ⊙ Dr.Sindhu T.K., Vice President, School Managing Committee.
- ⊙ Mr.P.Ananthakrishnan, Joint Secretary cum Treasurer, REC SPECTRA
- ⊙ Prof. Unnikrishnan Nambeesan, Senior Principal
- ⊙ Mrs Shiny A, Principal

10.0 NOTABLE ACHIEVEMENTS

10.1 PAST ACHIEVEMENTS

DEPARTMENT OF ARCHITECTURE

- The department has conducted several short term courses and summer/winter term courses sponsored by AICTE and IEI
- The department has three excellent centers:
 - Building Science Laboratory.
 - CAAD Laboratory
 - Material Museum
- The department has carried out large number of consultancy works and also plays a major role in industry- institute interaction.
- The department has also carried out large number of research projects.
- The faculty of the department has published papers in National and International Journals and National and International conferences.
- Workshops and Short Term Courses have been organized by the faculty of the Department.

DEPARTMENT OF CIVIL ENGINEERING

1. The department had taken up training of local unemployed youth for self-employment under the Nehru Rozgar Yoganas (NRY) funded by Kerala Urban Development Finance Corporation. The training was given in Plumbing, Carpentry, Masonry and Landscaping. About 300 youths were trained under this programme
2. The Department had three centres of excellence
 - a. Vehicle Motion Analyser Laboratory
 - b. Non Destructive Testing Laboratory
 - c. Biomechanics Laboratory
3. The Department has already conducted more than 30 summer/winter schools sponsored by Indian Society for Technical Education and All India Council for Technical Education.
4. The Department has organised in collaboration with Department of Training and Placement, more than 50 Short Term Courses in different fields of Civil Engineering
5. The Department has already produced 24 Ph.D Scholars in different fields of specialisation
6. The Department has carried out more than 38 sponsored Research Projects funded by MHRD, DST, ISCHMS, AICTE, Ministry of Water Resources etc.
7. The Department has been recognized as a Centre for Scrutinizing the Design of important Public Buildings, by the Government of Kerala.
8. The Department has generates on an average Rs. 22 lakhs per year through testing and consultancy
9. The Faculty of the Department published papers in the National and International Journals and National and International Conferences on an average of about 40 papers per year
10. The Ferro-cement technology transfer: Large scale water tank of 5,000 and 10,000 litres capacity, fabricated using Ferro-cement technology was transferred to JALANIDHI of Kerala Water Authority to be used under rain water harvesting schemes
11. Developed an effective retrofitting technique using ferrocemnt wrapping for RCC frames under distress.
12. Developed sustainable cementitious composites
13. The Department had received two patents in the area of Bio-mechanics for the following:
 - Dynamic External Wrist Fixator
 - External Fixator Assembly for Tibial Fracture
14. Community Services
 - Popularized the cost effective Ferrocement water tanks in the rural and urban sector
 - Design and Development of water conservation techniques such as rain water harvesting and construction of check dams
 - People participation programmes of Panchayats
 - Creating awareness of traffic rules and regulations in schools
 - Actively associated with the awareness building campaign in connection with the implementation of the Model Solid Waste Disposal Scheme in Calicut Corporation
 - Involved in a few biomechanics related projects which have benefited a number of patients visiting the Physical Medicine & Rehabilitation Centre of Calicut Medical College.
 - Organise special lectures on good construction practices at the Licensed Engineers and Supervisors Federation Kozhikode

- A project under the TEQIP under the Service to Community scheme titled “IT Training and Social Surveys for Chathamangalam Grama Panchayath”, October 2007 – March 2007
- Assists in implementing Model Solid Waste Disposal Scheme in Calicut City.
- Skill up-gradation of rural craftsmen and women workers under TEQIP
- Organized a 5-day Workshop on “Career Guidance and Preparation for Interview” for 80 students from colleges all over Kerala from November 29- December 3, 2007 as part of NSS activities, Conducted a 10 day special camp at Katippara Panchayat, Thamarassery, Kozhikode District from 7th December 2007 to 15th December 2007.
- Conducted “Self Enrichment programme” for a selected group of first year students of the Department of Civil Engineering, in association with Centre for Research & Education for Social Transformation (CREST), Kozhikode, 22nd December to 28th December 2012
- Ferrocement water tank for community water supply schemes
- Development of low cost precast structural elements such as walls, lintels, beams etc. For buildings in rural areas

DEPARTMENT OF ELECTRICAL ENGINEERING

- Dr. Mukti Barai had reviewed three papers on IEEE transactions on Power Electronics.
- Dr. Rijil Ramchand had reviewed papers for the three journals, IEEE transactions on Power Electronics IEEE transactions on Industrial Electronics, and IEEE Transactions on Fuzzy systems.
- Dr. Susy Thomas is the Member, Faculty of Engineering and Technology, Kerala University from 2010 onwards.
- Dr. Mukti Barai reviewed one paper submitted in IEEE Transactions on Circuits and Systems – part –II (TCAS-II)
- Dr. Kumaravel S, reviewed a paper submitted at Taylor and Francis in Electric Power components and Systems.
- Smt. Mija SJ, reviewed 2 papers at IEEE transactions on Industrial Electronics
- Dr. Susy Thomas served in the interview board of UPSC
- Dr. Susy Thomas was a reviewer for National Conference on “Technological Trends”, CET, TVM-2012
- Dr. Susy Thomas was Academic Audit External Expert for PhD, Karunya University.
- Mr. K.S. Suresh Kumar authored a book titled “Electric Circuit Analysis”, published by Pearson, ISBN-978-81-317-9155-4
- MV Vaidhyan, Member of Editorial board, International Journal of Life Sciences and Technology (IJLST).

DEPARTMENT OF MECHANICAL ENGINEERING

- Dr. Madhusudhanan Pillai : Developed a supply chain role play game – Version three is developed in this year. This game is similar to the ‘Beer Distribution Game’ of MIT, USA. The previous versions are very widely used for research and as a lab experiment/exercise for UG (Production Engineering) and PG (Industrial Engineering and Management) programmes. This Game is probably the first of its kind in India.
- Dr. Madhusudhanan Pillai : Developed a ‘Process Layout Planning Package’ in this year. Online and standalone versions are developed. Standalone version allows the optimal layout development. Simulated annealing based algorithm is used for near optimal development of layout. This algorithm based layout was used in the lab classes of UG (Production Engineering) and PG (Industrial Engineering and Management) programmes. This package is probably the first of its kind in India.
- Dr. Madhusudhanan Pillai : Developed an exercise for performance analysis of a four stage serial supply chain under P-system inventory control at all stages of the supply chain using Excel spread sheet. This is used as an exercise for PG (Industrial Engineering and Management) programme
- Dr. A. Shaija is selected as the joint secretary of Combustion Institute- Indian Section December, 2011

DEPARTMENT OF PHYSICS

Dr. P. Predeep

First reported the development of electric conductivity in unvulcanized natural rubber and many innovative applications for natural rubber like its use as an optical recording materials

Dr. M. K. Ravi Varma

- (i) 15 peer reviewed publications and over 25 conference proceedings
- (ii) 4 years of (post-PhD) industry experience
- (iii) 3 years of post-doctoral experience including teaching of UG courses
- (iv) 3 years of NIT teaching/research experience

Dr. P. K. Madhavan Unni

- (a) Assistant Professor, Department of Physics, NIT-Calicut (2010 – present)
- (b) Post-Doctoral Fellow, Department of Physics of Complex Systems, Weizmann Institute of Science, Israel (2006-2008)
- (c) Ph.D. in Physics, Department of Physics, Indian Institute of Science, Bangalore. (2006)
- (d) Senior Research Fellowship (SRF) (2000-2003), Council of Scientific and Industrial Research (CSIR), Government of India.
- (e) Junior Research Fellowship (JRF) (1998-2000), Council of Scientific and Industrial Research (CSIR), Government of India.
- (f) Qualified in the CSIR-UGC National Eligibility Test (NET) with JRF.
- (g) University 2nd Rank in M. Sc. Physics Course of the University of Calicut, Kerala, India (1993-1995)

SCHOOL OF NANO SCIENCE AND TECHNOLOGY

1. Dr. Sajith V and Shijo Thomas won the Dronacharya Award for the Best Faculty Advisors of the Teams participated in the Baja SAE India 2012 Competition held at Pithampur, Indore.
2. Dr. Sajith V. won the Best Young Teacher Award for the performance during the academic year 2007-08 from, NIT Calicut
3. Dr. Sajith V. won the Bhagyalakshmi & Krishna Iyengar Award for the best project in the year 2005, from IIT madras

10.2 ACHIEVEMENTS THAT TOOK PLACE DURING THE YEAR 2012-2013

DEPARTMENT OF ARCHITECTURE

a. Publications

i. Journals

Sl No	Name of the Author	Title of the Paper	Name of Conference	Publications/Journals
1	Dr. P.P.Anilkumar	'Impact Analysis of Critical Landuses on Urban Coastal Zones using the Coastal zone Health Index", , India,	Journal of the Institution of Town Planners	Volume-9, Number 2, April-June 2012 (ISSN 0537-9679).
2	Dr.P.P.Anilkumar Ar. Chithra.K	"Green Landuse planning as an alternate methodology for Sustainable Planning",	Journal of the Institution of Town Planners, India,	Volume-9, Number 1, 2012. (ISSN 0537-9679).

3	Dr. P.P.Anilkumar Ar. Chithra.K	An assessment of LEED based green building certification system from the energy efficient building perspective	-	International Journal of Emerging Technology and Advanced Engineering Vol 2, 316-320, February 2013
4	Dr. Kasthurba A K	Characterisation of Malabar Laterite as a Building Material June 2012	IES 2012, Kumamoto University, Japan 5-7 March 2012	International Journal of Earth Science and Engineering ISSN 0974-5904 2012 Vol.6 June 2012 (available online) IJEE-IES2012
5	Dr. T.M. Vinodkumar Ar. Bimal P.	Participatory Urban Design for Kerala	-	Spatio-Economic Development Record, Vol19, No.6, November-December 2012
6	Ar. Bimal P	"Form Based Coding Regulation: A new approach to Urban Conservation	-	ITPI Journal, Volume 9, Number -2 April – June 2012
7	Ar. Bimal P Ms. Vandita Srivastava Dr. P.P. Anilkumar	"Residential location choice with multi criteria"	'Geomatrix12', International conference held at IIT Bombay.	-

ii. International Conferences:

Name of the Author	Title of Paper	Name of International conference	Vol, Year, p.p.
Dr. P. P. Anilkumar	International conference on "Energy Resources and Technologies for Sustainable Development" (ICERTSD) at Bengal Engineering and Science University, Shibpur, Calcutta	"Effective and Passive Utilization of Solar Energy for Energy Efficient Buildings; an Application Perspective	7 th to 9 th February 2013.
Dr. P. P. Anilkumar	International conference on "Energy Resources and Technologies for Sustainable Development" (ICERTSD) at Bengal Engineering and Science University, Shibpur, Calcutta	"An Assessment of LEED based Green Building certification system from the Energy efficient Building perspective".	7 th to 9 th February 2013.
Dr. P. P. Anilkumar	International conference named Green Campus Summit 2013 jointly organized by Association for promoting Sustainability in Campuses and Communities (APSCC), Puducherry, India, Hamburg University of Applied Sciences, Research and Transfer Centre "Applications of Life Sciences", RCE Hamburg and Region and Centre for International Business and Sustainability (CIBS), London Met University, UK at Pondicherry	"Overview of natural stones as an energy efficient and climate responsive material choice for Leed certified green buildings."	April 04-05, 2013

Dr. Naseer M.A.	Energy Efficient Building Design: Revisiting Traditional Architecture	Energy and the Environment 2013, Osaka, Japan	6 th to 9 th June 2013. Paper No. 0526.
Dr. Kasthurba A K	Characterisation of Malabar Laterite as a Building Material	IES 2012, Kumamoto University, Japan June 2012	International Journal of Earth Science and Engineering ISSN 0974-5904 2012 Vol.6 June 2012 (available online) IJEE-IES2012
Ar. Chithra K	BIOTECHTURE – A new framework to approach buildings & structures for green campus design	Green Campus Summit 2013	Vol 1, 2013
Ar. Bimal P, Vandita Srivastava Dr. P.P. Anilkumar	“Residential location choice with multi criteria”	‘Geomatrix12’, International conference held at IIT Bombay.	-

iii. National Conferences:

Name of the Author	Title of Paper	Name of National conference	Vol, Year, p.p.
Dr. Naseer M.A.	Energy Efficient Design: Thermal Performance of Traditional Houses of Kerala	28 th NATIONAL CONVENTION OF Architectural Engineers	3 rd and 4 th November 2012

b. Community Services: NIL

c. Other Academic and Administrative Services:

SI No	Name of Faculty	Academic and Administrative Services
1.	Dr. P. P. Anilkumar	<ul style="list-style-type: none"> - Member, IRCC - Consultancy Coordinator - PTA Coordinator - Staff in Charge- BS Lab
2.	Dr. Kasthurba A.K.	<ul style="list-style-type: none"> - Staff in Charge- CA Lab
3.	Dr. Naseer M A	<ul style="list-style-type: none"> - Member BUGS - Member In-house Construction Projects - Member Department Vigilance Committee - Member in Doctoral Committee - B Arch Program in charge - PhD Coordinator - Reviewed research papers for the International Journal “Building and Environment” published by Elsevier - Invited to review research paper for the Journal of Institution of Engineers (India) - Member of Doctoral Committee at National Institute of Technology Thiruchirappalli
4.	Ar.Chithra K.	<ul style="list-style-type: none"> - FA to 2011 Batch - Staff in Charge- CAD Lab - Member, Golden jubilee public relations committee, NITC
6	Ar.Bimal P	<ul style="list-style-type: none"> - Faculty Advisor for 2009 Admission - Warden A Hostel - Faculty in-charge of IMD Lab - Faculty in-charge of Association of Student Architects, - Department Time Table in charge - ASA Faculty Incharge

7	Er. Shyni K	<ul style="list-style-type: none"> - Exam coordinator - DCC Secretary, - Class Committee chairperson –S4 - Seminar Hall In Charge
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d. Conferences/Summer Schools/ Short Term Courses/ Workshops Conducted:

Sl.No	Name of Faculty	Title	Coordinators	Duration & Period
1	Dr. Kasthurba A. K.	Traditional Architecture, Art and Crafts	Dr. Kasthurba A. K.	18-19 October 2012

e. Expert Lectures delivered in Conferences/ Seminars/Workshops:

Sl. No.	Name of Staff	Title of the Programme	Duration and Period	Organization
1.	Dr. A. K. Kasthurba	Historic City of Fort Kochi, Kerala, India-Symbiosis of Conservation and development int. Journal of World Academy of Engineering and Technology Vol.70, 2012 pp 480-491	-	-
2	Dr. A. K. Kasthurba	Kasthurba A K (2012) Characteristics of Malabar laterite as a building material-Field and laboratory studies ' Int. journal of Earth sciences and Engineering. Pp 518-523 ISSN 0974-5904, Vol. 05, No.03 (01)	-	-

f. Details of Faculty who acquired Higher Qualification :NIL

g. Consultancy and Testing:

Sl. No	Nature of Service	Organization	Revenue earned	Status
1.	Total Habitat development (THDP) for Attappady Hill Area Development Society (AHADS) for 3 tribal settlements namely Padavayal, Kolappadika and Thekkuppana at an approximate cost of Rs. 7 crores. Total projectwork constituted the tasks of Detailed Project Preparation (DPR), Typology development and the total project implementation in a span of about 12-18 months. Income earned for the Institute -42 lakhs.	Attappady Hill Area Development Society (AHADS)	42 Lakhs	Completed in 2012.
2	Interior Layout Design and Accoustical Design of a 1,000 capacity Auditorium for Koyilandy Municipality	Koyilandy Municipality	Received part payment of 2 lacks	Ongoing
4.	Project Report Preparation for the Comprehensive renovation of Maharaja's College, Ernakulam	Maharaja's College, Ernakulam	-	Ongoing.
5	Renovation Works of Heritage sites- Tali temple; Misqal mosque;Iringannoor Maha Siva Temple, Tuneri	Gol	Received part payment of 25,000 till date	Ongoing.

h. Patents acquired and filed:NIL

i. Student achievements:

- 1st Place in the 'Kannur Airport Terminal Design Competition' grabbed by a team of two - Thomas Joseph (B080258AR) & Sajith P (B080302AR), Won a cash prize of `1,50,000
- Special mention in 'University of Westminster' Trophy in the 55th Annual NASA Convention. Team comprising of four members -Pravar Chaudhary (B100486AR) Vijay Gopal V P (B100129AR), Muhammed Firos M C (B100236AR), Swapnil Sangeet Shrivastav (B110407AR)
- After a long period of time NIT Calicut participated in ZONAZA held at Coimbatore .Students of Architecture Department came an overall 3rd among 76 colleges in the zone; Zone-6 comprising of colleges from Kerala & Tamilnadu. They achieved 'Special Mention' for SIDC Trophy.
- Animesh Debnath (B110303AR) won 2nd Prize of Rs.15000/- in 'ADARSH
- National Photography Competition

Jury Commendation for Swapnil Sangeet Shrivastav (B110407AR) in Green City Design Competition 2012, conducted by Ethos India& Indian Green Building Council (IGBC).

DEPARTMENT OF CHEMICAL ENGINEERING

a. Publications

i) Journals

Name of the Author	Title of Paper	Name of Journal	Vol, Year, p.p.
P. Karthic, Shiny Joseph	Comparisons and Limitations of biohydrogen production processes	Research Journal of Biotechnology	Vol.7,No.2,2012, pp.59-71
P.Karthik, Shiny Joseph, Naveenji Arun	Optimization of Process variables for biohydrogen production from glucose by <i>Enterobacter aerogenes</i>	Open Access Scientific Reports	Vol.1,No.2,2012
P.Karthik, Shiny Joseph, Naveenji Arun, S. Kumaravel	Optimization of biohydrogen production by <i>Enterobacter Species</i> using artificial neural network and response surface methodology	Journal of Renewable & sustainable Energy	Vol.5, 2012
S. Bhuvaneshwari, D. Sruthi and V. Sivasubramanian,	Regeneration of chitosan after heavy metal sorption	Journal of Scientific and Industrial Research	vol.71, 2012, pp. 266-269
N.Selvaraju, S.Pushpavanam, Anu N	A Holistic Approach Combining Factor Analysis, Positive Matrix factorization and Chemical Mass balance Applied to Receptor Modeling	Environmental Monitoring and Assessment	Article in press
Rangabhashiyam S, Anu N and N. Selvaraju	Sequestration of dye from textile industry wastewater using agricultural waste products as Adsorbents	Journal of Environmental Chemical Engineering	Article in press

Rahul Antony, Arun G, Anu N and N.Selvaraju	Numerical Investigation of Phenol Extraction using Liquid-Liquid Stratified Flow in a T shaped Micro-Channel	International Journal of Computer Applications	Vol 59 (12), December (2012)
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ii)International conference

Name of the Author	Title of Paper	Name of International conference	Vol, Year, p.p.
P. Karthic, Shiny Joseph	Developing a statistical model for fermentative hydrogen production	3 rd World Congress on Biotechnology – 2012, HICC, Hyderabad	Sept'2012
P. Karthic, Shiny Joseph	Central composite design for biohydrogen production from glucose using Enterobacter spcs	CHEMCON - 2012 – 65 th Annual Session in Chandigarh by Indian Institute of Chemical Engineers	Dec'2012
Amit Hajari, Dinesh Waskel, HariHaran.T, Shiny Joseph	Activated carbon preparation from coconut shell by acid treatment and adsorption studies using methylene blue dye	BIOFEST – 2012, by Bright International Conferences and events, Hyderabad	Dec'2012
R.Sivashankar, Dr.V.Sivasubramanian, K.Vasantharaj, A.B.Sathya	Study on the biosorption of synthetic dyes using immobilized fungal biomass and aquatic weeds	3 rd World Congress on Biotechnology	Vol. 2, Issue. 6, 2012, 2012 P.P.250
R.Sivashankar, Dr.V.Sivasubramanian, A.B.Sathya, Sreedha pallipad	Biosorption of Hazardous Azo Dye Metanil Yellow using Immobilized Aquatic weed	Intl. Conf. on Future Trends in Structural, Civil, Environmental and Mechanical Engineering	ISBN: 978-981-07-7021-1 doi:10.3850/ 978-981-07-7021-1_72
Anu N. , N. Selvaraju	Source apportionment using receptor model: comparison of receptor model by optimization techniques using genetic algorithm and receptor model tool box	Indian Chemical Engineering Congress, CHEMCON 2012	Dec 28 – 30 , 2012
Amit Ranjan , S. Ramanathan , N. Selvaraju	Experimental determination of non-uniformity in microwave heating of food, by in situ temperature measurement	Indian Chemical Engineering Congress, CHEMCON 2012	Dec 28 – 30 , 2012

iii)National conference

Name of the Author	Title of Paper	Name of National conference	Vol, Year, p.p.
Anu N. , N. Selvaraju	Source apportionment using receptor model: comparison of receptor model by optimization techniques using genetic algorithm and receptor model tool box	Indian Chemical Engineering Congress, CHEMCON 2012	Dec 28 – 30 , 2012

Amit Ranjan , S. Ramanathan , N. Selvaraju	Experimental determination of non-uniformity in microwave heating of food, by in situ temperature measurement	Indian Chemical Engineering Congress, CHEMCON 2012	Dec 28 – 30 , 2012
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b. Community services:NIL

c. Other academic and administrative services

Name of Staff	Academic and Administrative Services
Dr.Lity Alen Varghese	Head-CHED from 1 st Aug 2012, faculty advisor till July 2012, BOAC member, coordinator of proposed MTech program, purchase committee member, dept purchase coordinator, faculty in charge -Chemical Technology Lab
Dr.Shiny Joseph	Class committee chairman, faculty advisor, dept purchase committee coordinator, NBA coordinator, project coordinator
Dr.V.Sivasubramanian	Faculty Advisor, Class Committee Chairman, Faculty Co-Ordinator-Seminar, Purchase committee member, APRC (Academic Performance Review Committee) member, Curriculum Revision Committee member, Co-Ordinator-Environmental Lab, Co-Ordinator-Proposal of new M.Tech program.
Dr. Aparna.K	Faculty advisor, class committee chairman, library in charge, faculty in charge of PDC lab, project coordinator
Smt. S. Bhuvaneshwari	Department exam coordinator till Nov2012, faculty in charge of research lab, faculty advisor, project guide
Mr.Vineesh Ravi	Faculty advisor, library in charge, faculty in charge of Heat transfer lab
Dr.N.Selvaraju	Faculty Advisor, Department: Placement In charge, Faculty in charge: Environmental Lab, Co-Ordinator-Proposal of new M.Tech program, Class committee chairman, TEQIP II Co-Ordinator, Department Exam Co-ordinator, Dean Plan Fund CO-Ordinator, Hostel Warden (A Hostel)
Mr.Haribabu	Faculty Advisor (2012-16 Batch), Faculty Incharge of Reaction Engineering Lab, Department Co-Ordinator: Parent Teacher Association.
Dr.Pavan Kumar	Faculty Advisor, Faculty Incharge of Mechanical Operations Lab, Department Timetable incharge, CHEA Faculty Co-Ordinator, PhD Co-Ordinator, CCB (AIEEE2012) at NITC for admission To BTech/BArch, Warden-E Hostel

d. Conference/Workshop/winter school/short term courses/workshops conducted

Sl.No	Title	Coordinators	Duration & Period
1	Modeling and Simulation in Chemical and Environmental Engineering	N.Selvaraju, Lity Alen Varghese, Dr. V Sivasubramanian	May 28-June1,2012

e. Expert lectures delivered in conference/seminar/workshops

Sl. No.	Name of Staff	Title of the Programme	Duration and Period	Organization
1.	Dr.V.Sivasubramanian	Chemical Engineering Design modeling & simulation	March, 2013	Government Engineering College, Kozhikode, Kerala.
2.	Dr.V.Sivasubramanian	Industrial Effluent Treatment Emerging Trends & challenges Ahead	Jun 11-15,2012	Annamalai University, Chidhambram, Tamilnadu.
3.	N.Selvaraju	Chemical Engineering Design, Modeling and Simulation	March 2013	Department of Chemical Engineering at Government Engineering College,Kozhikode

4.	N.Selvaraju	Modeling approaches in air quality monitoring and source apportionment	December 2012	Department of Chemical Engineering at National Institute of Technology Karnataka , Surathkal
5.	N.Selvaraju	Transfigures in Bioscience and Technology	September 2012	Department of Bio Technology at Madha Eng College
6.	N.Selvaraju	Emerging Contaminants: Analysis, Fate, Treatment and Modelling	July 2012	Department of Civil Engineering, NIT Calicut
7.	N.Selvaraju	Water Resources and management	June 2012	Division of Hydrology and Water Resources Engineering at CWRDM (Centre for water resources development and Mangament)
8.	N.Selvaraju	Modeling and Simulation in Chemical and Environmental Engineering	June 2012	Department of Chemical Engineering at NIT Calicut
9.	N.Selvaraju	Adsorption in wastewater Treatment & Air and water Quality Model	June 2012	Department of Chemical Engineering at Annamalai University
10.	Malladi V Pavan Kumar	Chemical Engineering Design, Modeling and Simulation Title of the Lecture – “Reactive Distillation- Design and Control”	12-14 March 2013	Department of Chemical Engineering, Government Engg College, Kozhikode
11.	Malladi V Pavan Kumar	Modeling and Simulation in Chemical and Environmental Engineering", a Faculty Development Program Organised by Department of Chemical Engineering, NIT Calicut "Steady State Simulation of Chemical Engineering Processes using Chemsep LITE v 6.90 and COCO	28 May – June 1 , 2013	Department of Chemical Engineering, NIT Calicut
12.	Malladi V Pavan Kumar	-Modeling and Simulation in Chemical and Environmental Engineering", a Faculty Development Program Organised by Department of Chemical Engineering, NIT Calicut -Title of the Lecture - Steady State Modeling and Simulation of a Two Feed Two Product Ideal Reactive Distillation Column	28 May - 1 June 2012	Department of Chemical Engineering, NIT Calicut

13.	Malladi V Pavan Kumar	-Modeling and Simulation in Chemical and Environmental Engineering", a Faculty Development Program Organised by Department of Chemical Engineering, NIT Calicut -Title of the Lecture - "Introduction to Plantwide Process Control and Simulation	28 May - 1 June 2012	Department of Chemical Engineering, NIT Calicut
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f. **Details of Faculty, who acquired Higher Qualification : NIL**

g. **Consultancy and testing :NIL**

h. **Patents acquired and filed:NIL**

i. **Student achievements :**

- Amit Hajari, Dinesh Waskel, HariHaran.T, won the best poster award in BIOFEST – 2012, by Bright International Conferences and events, Hyderabad, Dec 2012
- Swathi S Kumar and Jishnu (VI semester B.Tech) won second prize in quiz competition organized by Indian Institute of Chemical Engineers, Kochi region., March 2013
- K V Swaroop and Jayadhar G (V semester B.Tech) won second prize for the event "Enviroengineer" in Dyuthi 2012 held at GEC Thrissur, September 2012

DEPARTMENT OF CIVIL ENGINEERING

(a) Publications

Sl. No.	Name of the Authors	Title of paper	Name of Journal/conference	Publications Details
1	Ganesan N, Bharati Raj and Shashikala AP. (2012). ""	Strength and durability studies of Self Compacting Rubberised Concrete	The Indian Concrete Journal	Vol.86, No.9, Sept. 2012, pp.15-24
2	Ganesan N, Bharati Raj, Shashikala AP and Nandini S Nair. (2012)	Effect of steel fibres on the strength and behaviour of Self Compacting Rubberised Concrete	International Journal of Civil Engineering and Technology (IJCIET)	Vol. 3, Issue 2, July-Dec. 2012, pp. 94-107
3	Ganesan N, Bharati Raj and Shashikala AP (2012)	Behaviour of Steel Fiber Reinforced Self Compacting Rubberised Concrete Beams under monotonic loading	28 th National Convention of Civil Engineers and National Seminar on Role of Infrastructure for Sustainable Development	Oct. 12-14, 2012
4	Safeer Ali Abbas Ali, Arun C, (2012)	Time Waste and Delays in Construction Projects: A State of the Art Report	NICMAR Journal of Construction Management	Vol 27, No 4, October - December 2012
5	S.Lakshminarayanan , Ashish Gaurav, Neethu Krishna M and Dr. Arun C (2012)	Cost and Time Overrun Analysis for Green Construction Projects	International Journal of Green Economics	Vol 6 No 2 pp 167- 177
6	S.Lakshminarayanan , Ashish Gaurav, Neethu Krishna M and Dr. Arun C (2012)	Cost Overrun Assessment for Green Construction Projects	Proceedings of World Construction Conference 2012 – Global Challenges in Construction Industry.	28th- 30th June 2012, Colombo Sri Lanka pp 62- 68
7	S.Lakshminarayanan , Ashish Gaurav and Dr. Arun C (2012)	Multi Objective Schedule Optimization (MOSO) for construction project scheduling	International Journal for Project Planning & Finance	Dec 2010, Vol 1, No. 1, pp 22-38, ISSN : 2026-5190
8	Varghese, George K. and Babu J. Alappat. (2012)	The National Green Tribunal Act: A harbinger for the development of Environmental Forensic in India	Environmental Forensics	13:3, 209-215

9	Kaushal, R. K., George K. Varghese and Mayuri Chabukdhara. (2012)	Municipal Solid Waste management in India- Current State and Future Challenges: A Review	International Journal of Engineering Science and Technology	Volume 4, No. 4, p 1473-1489
10	Varghese, George K. and Babu J. Alappat. (2012)	Pollution Source characterization for effective groundwater resource management	Proc. 3rd GEM-IITD Indo- French Seminar on "Recent advances and innovations for sustainable water management	IIT Delhi, 3-6 December 2012
11	Harikrishna Madhavan and Rajat Rastogi, (2013), ..	Social and Psychological Factors Influencing Destination Preferences of Domestic Tourists in India	Leisure Studies, The Journal of Leisure Studies Association, Routledge Group (Partner of Taylor and Francis Group), London	Volume 32, Issue 2, 207-217
12	Harikrishna M., Rajat Rastogi and Daya Purushothaman (2012)	Influence of Socio-demographic Attributes in Travel Mode Selection for Single day Excursion Trips	Highway Research Journal, Journal of Indian Roads Congress, New Delhi, India	Volume 5, No.1, 15-31
13	Rajat Rastogi and Harikrishna M. (2012)	Identification of Decision Paths in Modal Choices: A Structural Equation Modelling Approach	Proceedings of TSE Silver Jubilee International Conference on Transportation Planning and Implementation Methodologies for Developing Countries (10 th TPMDC 2012)	December 12-14, 2012, pp 560-573
14	K. Krishnamurthy and V. Thamizh Arasan (2012).	Effect of road with and traffic volume on vehicular interactions in heterogeneous traffic.,	Journal of Advanced Transportation	DOI;10.1002/atr
15	K. Krishnamurthy and Aravind E.N, (2012)	Identification of Accident Blackspots by Empirical Bayesian method and improvements on NH-212 and NH-213 in Kerala.	Proceedings of the National Conference and Workshop on Recent Advances in Traffic Eng (RATE-12)	National Institute of Technology Surat, 07-09 th July, 2012
16	Sreelekha, M.G, K. Krishnamurthy and M.V.L.R. Anjaneyulu (2012)	Spatial Analysis of Road Transport System.	Proceedings of the Research Symposium 2012, Urban Mobility India 2012	Indian Institute of Technology, Delhi, 5 th December 2012
17	Deepak P.S. and Rangaswamy K. (2012).	Strength and deformation characteristics of soil bags	Proceedings of Indian Geotechnical Conference -2012, IIT Delhi	Dec. 13-15, Paper No. E553
18	Deepak P.S. and Rangaswamy K. (2012).	Load deformation characteristics of soilbag reinforced earth.	Proceedings of Innovations and challenges in Geotechnical Engg - 2012, IES college of Engineering Trichur	Dec. 3-4, Paper No. B008
19	Reethi V.P. and Rangaswamy K. (2012).	Geotechnical properties of soft clay stabilized with fly ash and lime stone dust	Proceedings of Innovations and challenges in Geotechnical Engineering -2012, IES college of Engg.	Dec. 3-4, Paper No. B009
20	Hong-Bang Cheng, Mathava Kumar, Jih-Gaw Lin (2012)	Interpretation of redox potential variation during biological denitrification using linear non-equilibrium thermodynamic model	International Biodeterioration and Biodegradation,	67, 28-39.

21	Mathava Kumar, Pei-Yun Lee, Toshikazu Fukusihma, Liang-Ming Whang, Jih-Gaw Lin (2012)	Effect of supplementary carbon addition in the treatment of low C/N High-technology industrial wastewater by MBR	Bioresource Technology	113, 148-153
22	Mathava Kumar, Jih-Gaw Lin (2012),	Co-composting of Food Waste and Green Waste in Pilot-Scale Systems: In-vessel and Windrow Investigations	Antoni Sanchez Ferrer (Eds.), Dynamic Soil, Dynamic Plant 5 (Special issue 2), Global Science Books, Japan	Global Science Books, Japan, 127-133
23	Asha. C. Raju, Madem Sadhana, Pentakota Saran Kumar, R Sribhanupratap Rathod, Revanth Reddy Katta, Mathava Kumar (2013)	"Real-Time Poultry Wastewater Treatment in a Photocatalytic System: Effect of UV Power and Catalyst Dosage",	Proc. National Conference on Environmental Sustainability and Society: The Growing Paradigm Shift (ESS – 2013),	30 & 31 March, 2013, Jaypee University of Engineering & Technology, Madhya Pradesh, India
24	Asha C Raju, Amit Pandey, Prashant Chedwal, Ravi Ranjan, Rohit Kumar, Rohit Tamta, Mathava Kumar (2013)	Application of Photo-Fenton Process for Poultry Wastewater Treatment	Proc. National Conference on Environmental Sustainability and Society: The Growing Paradigm Shift (ESS – 2013),	30 & 31 March, 2013, Jaypee University of Engineering & Technology, Madhya Pradesh, India
25	N.Ganesan, Bharati Raj and A.P.Shashikala (2013)	Flexural Fatigue Behavior of Self Compacting Rubberized Concrete, Construction and Building Materials	An International Journal of ELSEVIER	Vol. 44, 2013, pp.7-14
26	N.Ganesan, P.V.Indira and M.V.Sabeena (2013)	"Behaviour of Hybrid Fibre Reinforced High Performance Concrete under Direct Shear", Innovations in Concrete Construction	Proceedings of the International UKIERI Concrete Congress	NIT Jalandhar, 5-8 March 2013, pp. 253-262
27	N. Ganesan, P.V.Indira, Anjana Santhakumar (2012)	Shear Behaviour of Steel Fibre Reinforced Geopolymer Concrete Flexural Members	Proc. National Conference on Recent Advances in Civil Engineering	Nov. 29 - Dec. 01, 2012, Kochi, pp.311-315
28	N. Ganesan, P.V.Indira, Sabeena.M.V (2012)	Effect of Hybrid fibres on the Compressive Constitutive Behaviour of High Performance Concrete under Cyclic Loading	Proc. National Conference on Recent Advances in Civil Engineering	Nov. 29 - Dec. 01, 2012, Kochi, pp.311-315
29	S.Sheela and N.Ganesan (2012)	Predicting the Ultimate Load carrying capacity of Polymer Modified Ferrocement Flexural Members	The Indian Concrete Journal	Vol.86, No.11, November 2012, pp.43-51
30	N.Ganesan, P.V.Indira and Anjana Santhakumar (2012)	Durability Characteristics and Compressive Constitutive Behaviour of Steel Fibre Reinforced Geopolymer Concrete	Proc. 3rd International Conference on the Durability of Concrete Structures	Queen's University Belfast, 17-19, Sept. 2012, pp.PER8/1-PER8/6
31	N.Ganesan, P.V.Indira and M.V.Sabeena (2012)	Effect of Hybrid Fibres on the Shear and Durability Behaviour of High Performance Concrete	Proc. 3rd International Conference on the Durability of Concrete Structures	Queen's University Belfast, 17-19, Sept. 2012, pp.MAT11/1-MAT11/6

32	N.Ganesan (2012)	Strength and Durability of Fibre Reinforced High Performance Concrete Structural Elements	Keynote paper, International Workshop on Sustainability and Advances in Concrete Technology (SACT 2012),	National Institute of Technology Calicut, Kerala, India, 7-8, May 2012, pp. 309-345
33	Sreela PK & Anjaneyulu MVL R (2012)	Mode Choice Behaviour Of Urban Dwellers For Work Commute,	Proceedings of the Research Symposium 2012, Urban Mobility India 2012	Indian Institute of Technology, Delhi, 5 th December 2012
34	Anjana S. Deepa S. Anjaneyulu M.V.L.R (2012)	Accident Modification Factors for Safety Evaluation of Signalised intersections in Urban Areas	Proceedings of the Research Symposium 2012, Urban Mobility India 2012	Indian Institute of Technology, Delhi, 5 th December 2012
35	Anitha Jacob & Anjaneyulu M.V.L.R (2013)	Development of Crash Prediction Models for Two-Lane Rural Highways using Regression Analysis	Highway Research Journal, Indian Roads Congress	Vol. 6, No. 1, January 2013, pp. 59-70
36	Anitha Jacob & Anjaneyulu M.V.L.R (2013)	Operating Speed of Different Classes of Vehicles at Horizontal Curves on Two-Lane Rural Highways	ASCE Journal of Transportation Engineering	Volume 139, Issue 3 (March 2013), 287–294
37	T P Somasundaran (2012)	Forensic Structural Design	Kerala PWD Engineers Magazine	
38	Harikumar and N Sankar (2012)	"Settlement prediction of shallow foundations using artificial neural networks"	Proc. National Conf. on Recent Advancements n Geotechnical Engineering,.	Coimbatore, April 2012
39	Chinchu Cheriyan and N.Sankar (2012)	"A Knowledge and Data-Driven Expert System for Ground Improvement"	Proc. National Conf. on Recent Advancements n Geotechnical Engineering,.	Coimbatore, April 2012
40	Greeshma Nizy Eujine and N.Sankar (2012)	"Development of an Electronic Dictionary of Geotechnical Engineering"	Proc. National Conf. on Recent Advancements n Geotechnical Engineering,.	Coimbatore, April 2012
41	M Harikumar and N Sankar (2012)	"Settlement prediction of shallow foundations using Artificial Neural Networks"	Proc. IGC Dec. 2012 New Delhi	New Delhi, Dec. 2012
42	Chinchu Cheriyan and N.Sankar (2012)	" A Knowledge And Data Driven Expert System For Ground Improvement"	Proc. IGC Dec. 2012 New Delhi	New Delhi, Dec. 2012
43	M Harikumar and N Sankar (2012)	"Artificial Neural Networks in predicting settlement of Foundations"	Proc. Intl. Conf on Global Innovations in Technology and Science, Saingits college of engg., Kerala.	Feb. 2013, Kerala.
44	Chinchu Cheriyan and N.Sankar (2012)	"An Expert System In Visual Basic For Prediction of Ground Modification Techniques"	Proc. Intl. Conf on Global Innovations in Technology and Science, Saingits college of engg., Kerala.	Feb. 2013, Kerala.

Books published:

- Mathava Kumar (2012), Biodegradation of Emerging Contaminants by Composting, T. Vicent et al. (eds.), Emerging Organic Contaminants in Sludges: Analysis, Fate and Biological Treatment, Hdb Env Chem, ISBN: 978-3-642-35608-7, Springer-Verlag Berlin Heidelberg, Germany.

(b) Community services:

Dr. Santosh G Thampi:

- Member, Hydrology Data Users Group, Kozhikode Dt.
- Member, Technical Committee on Total Sanitation, Kozhikode Dt.

- Member, TAG on Water Supply and Sanitation, Kozhikode Corporation
- Member, Technical Committee Constituted by the Govt. of Kerala to Evaluate Proposals for Consultancy Services for the Sewage Treatment Plant, Medical College Hospital, Kozhikode
- Member, Technical Committee Constituted by the State Mission Director, National Rural Health Mission to Monitor the Progress in Construction of the Sewage Treatment Plant at Medical College, Hospital, Kozhikode
- Member, District Level Planning Committee on Irrigation, Kozhikode District
- Resource Person and Expert, Model Solid Waste Disposal Project of the Kozhikode Corporation

Dr. P Syamala : Member- Dam safety authority, River management committee, and advisory board-MICTRA

Sri. Harikrishna M & Dr. Sajith A S : Conducted "Self Enrichment programme" for a selected group of first year students of the Department of Civil Engineering, in association with Centre for Research & Education for Social Transformation (CREST), Kozhikode, 22nd December to 28th December 2012

Dr. S Mathava Kumar: Designed a "Solid waste management and collection system for NITC campus"

(c) Other Academic and administrative services

Name of Faculty	Academic and administrative services
Dr. N. Ganesan	<ul style="list-style-type: none"> • Dean (Planning & Development) • Member in many of the Doctoral Committees • Member of Senate of NITC • Chairing technical sessions under Structural Engg at the 13th National Conference on Technological Trends 2012 at College of Engg, Trivandrum on 10th & 11th August 2012
Dr. V Mustafa	<ul style="list-style-type: none"> • Chairman/Member in many of the Doctoral Committees • Member of Senate of NITC • Member of the Board of Governance of PWD Engineering Design Organization; Government of Kerala • Planning and Revision of Curriculum • Co ordinator – Department Consultancy projects
Dr. T P Somasundaran	<ul style="list-style-type: none"> • Chairman Institute Canteen Committee • Member of Senate of NITC • Member, Buildings and Works committee, Central University of Kerala, Kasargod, Kerala • Member, Buildings and Works committee, Malayalam University, Tirur, Kerala • Member, Buildings and Works committee, NIT Goa • Coordinator of M.Tech programme in Offshore structures
Dr. P Syamala	<ul style="list-style-type: none"> • Head of the Department • I/C of Water resources Lab. • Member of Senate of NITC • Member- Dam safety authority, River management committee, and advisory board-MICTRA • Member in many of the Doctoral Committees • Faculty adviser for students of B.Tech (Civil) 2008 Admission • Co ordinator – counselling students
Dr. S. Chandrakaran	<ul style="list-style-type: none"> • Expert member of TRDM to review water shed projects submitted to Govt. of Kerala • Member of Senate of NITC • Member in many of the Doctoral Committees • Reviewer of Indian Geotechnical Journal • Reviewer of Journal of structural engineering • Reviewer of International journal of geotextiles and geomembranes
Dr. T Zacharia Varghese	<ul style="list-style-type: none"> • Faculty adviser for students of B.Tech (Civil) 2009 Admission • Member of Senate of NITC • Examination in-charge of the Department
Dr. J Sudhakumar	<ul style="list-style-type: none"> • Member dept. purchase committee • Member of Senate of NITC • Faculty Adviser, 2009 Admission (Civil) • Preparation of Time Table & Class Room for the Department

Dr. N Sankar	<ul style="list-style-type: none"> • Expert Member in the NBA committee for the Accreditation of courses in an University in Lucknow, October, 2012. • Expert Member for some Interviews conducted by the UPSC in Feb.2013 • I/C of Geotechnical Engineering Lab. • Member of Senate of NITC • Chairman examination vigilance committee • Member in many of the Doctoral Committees • Coordinator of M.Tech programme in Environmental Geotechnology
Dr. M V L R Anjaneyulu	<ul style="list-style-type: none"> • Chairman, UG admission for the Institute • I/C of Transportation Engineering Laboratory • Member of Senate of NITC • Coordinator of M.Tech programme in Traffic and Transportation planning • Member, Departmental purchase committee • Member, IRC - HRB - Identification, Monitoring and Research Application (IMRA) Committee. • Coordinator, State Technical Agency, PMGSY, NRRDA • Chaired the workshop on "Sustainable Transport Planning and Policy", at Conference of Transportation Research Group of India (CTRG), 7th to 10th December, 2011, Vivanta, Bangalore. • Member (AICTE Nominee), Board of Governors, Government Engineering College Wayanad • Member, Consultative Committee, Transportation Research Centre, College of Engineering, Trivandrum
Sri K Saseendarn	<ul style="list-style-type: none"> • Member of Senate of NITC • I/C of Geotechnical Engineering Lab.- assistant
Dr. Mohammed Ameen	<ul style="list-style-type: none"> • Head, Centre for Bio Mechanics • Member of Senate of NITC • Member of the Library Advisory Committee of NITC • Member in many of the Doctoral Committees • PhD Programme Coordinator of the Department • Faculty Advisor for Civil batch 2010
Dr. P V Indira	<ul style="list-style-type: none"> • Coordinator, Centre for Continuing Education • Member of Senate of NITC • Member in many of the Doctoral Committees • Coordinator of M.Tech programme in Structural Engg • Faculty adviser for students of B.Tech (Civil) 2011 Admission
Dr. A P Shashikala	<ul style="list-style-type: none"> • President of Civil Engineering Association • I/C Offshore Engineering Lab • Member of Senate of NITC • Faculty adviser for students of B.Tech (Civil) 2010 Admission • Member in many of the Doctoral Committees, DCC, DPC • Chair person, Class Committee.
Dr. T M Madhavan Pillai	<ul style="list-style-type: none"> • Reviewed of International Journal of Ocean Engineering – Elsevier • Reviewed of International Journal of Construction and Building Materials – Elsevier • Reviewed Chapters 4, 5, and 7 of the book titled 'Pre stressed Concrete Structures ' by Dr. Praveen Nagarajan, Published by Pearson Education, India • Reviewed Chapters 2, 7, 11 and 24 of the book titled 'Analysis of Structures ' by Dr. T S Thandavamoorthy, Published by Oxford University Press India, New Delhi • Member, Board of Studies, Civil Engg., NIT, Trichy. • Adviser, (WS & FS, Weaker students & Foreign Students), NITC • Coordinator SC/ST cell of the Institute, NITC • Member of Senate of NITC • Departmental information facilitation in-charge for Annual Report etc • Faculty Advisor for Civil batch 2011 • Co ordinator – Department Consultancy projects • Member of Building Works Technical Advisory Committee (BWTAC) of the Institute since 25/05/2012

Dr. Santosh G Thampi	<ul style="list-style-type: none"> • Co-ordinator, Student Counselling • Preparation of Time Table & Class Room of the Institute and Department • I/C of CAD. Lab. • I/C of water resources engineering lab. - assistant • Department Co ordinator – World Bank Scheme TEQIP Committee • Board of Examiners (PG), Water Resources Engineering, Bangalore University • Faculty i/c, Departmental Web Page Management • Member in many of the Doctoral Committees • Reviewer of International Journal for Numerical Methods in Fluids • Reviewer of International Journal Special Topics and Reviews in Porous Media • Faculty Advisor for Civil batch 2011
Dr. K Sasikumar	<ul style="list-style-type: none"> • Faculty adviser for students of B.Tech (Civil) 2007, 2012 admissions • I/C of Survey Lab.
Dr. Arun C	<ul style="list-style-type: none"> • Faculty adviser for students of B.Tech (Civil) 2010 Admission • Secretary of Regional Engineering College Calicut Alumni Association (RECCAA) (2008-2012) • Faculty in Charge of NITC Health Center (2010 – till date) • Chief Returning Officer, NITC Student Affairs Council Elections 2011 • Adjunct Faculty at School of Management Studies, NITC • Member of NITC Grievance Redressed Cell for Faculty
Dr. Sajith A S	<ul style="list-style-type: none"> • Staff Editor of Institute Magazine • Faculty Adviser, 2008 & 2012 Admissions (Civil) • Vice President – Civil Engineering Association (CEA) • Warden, Institute Hostels (B – Hostel)
Dr. Praveen Nagarajan	<ul style="list-style-type: none"> • Lab-in Charge of SM/Concrete/Structural Lab, CED • I/C of Seminar Labrary • Co-ordinator, B. Tech project evaluation • Faculty adviser for students of B.Tech (Civil) 2008 & 2012 Admissions • Co-cordinator of PG programme, CEA
Sri. George K Varghese	<ul style="list-style-type: none"> • Faculty adviser for students of B.Tech (Civil) 2011 Admission
Sri. Harikrishna M	<ul style="list-style-type: none"> • Scrutiny of Detailed Project Reports of rural roads under PMGSY Scheme as Member of State Technical Agency, PMSY Scheme, Northern districts of Kerala • Sub-reviewer of research papers for 2nd Conference of Transportation Research Group of India (CTRG 2013), India • Faculty Advisor 2012 Admission batch • Member, Central Library Advisory Committee • Nodal Officer to co-ordinate activities relating to Cvil Works including Environmental Management of TEQIP- Phase – II
Ms.Chitra N R	<ul style="list-style-type: none"> • Warden for Ladies Hostel • Faculty adviser for students of B.Tech (Civil) 2008 Admission • I/C of drawing office
Smt. Reesha Bharath K	<ul style="list-style-type: none"> • Faculty adviser for students of B.Tech (Civil) 2009 Admission • Warden NITC hostel
Dr. Vinu Palissery	<ul style="list-style-type: none"> • Faculty Adviser, 2009 Admission (Civil) • Co-coordinator of M.Tech programme in Offshore structures
Dr. K Rangaswamy	<ul style="list-style-type: none"> • Faculty Advisor – 2010 admission • Warden, NITC Hostel (PG 2) • I/C of Geotechnical Engineering Lab-assistant.
Dr. K Krishna Murthy	<ul style="list-style-type: none"> • Executive Engineer (I/C), NIT Calicut • Secretary to the Department
Sri. M Sivakumar	<ul style="list-style-type: none"> • Faculty Advisor for Civil batch 2010 • I/C of Transportation Engineering Laboratory
Dr. Mini Ramanan	<ul style="list-style-type: none"> • Member, B. Tech project evaluation • Faculty Advisor of the current S6 Civil 2008 Batch
Dr. Madhav Kumar S	<ul style="list-style-type: none"> • Faculty Advisor for Civil batch 2010 • I/C of Environmental Engineering Lab. • Member, M.Tech Env. Geotechnology, Thesis Evaluation Committee • Dept. representative, Inst. Research and Consultancy Committee (IRCC), NIT Calicut • Member, CED Webpage Design & Development Team • Designed a system for Solid Waste management in NITC Campus
Sri. D Sathish Kumar	<ul style="list-style-type: none"> • Faculty Advisor for Civil batch 2011

(d) Conferences/Summer/Winter Schools/ Short term Courses/Workshops Conducted:

SI No	Name of Staff	Title of the Programme	Organisation
1	Sri. Harikrishna M	Conducted "Self Enrichment programme" for a selected group of first year students of the Department of Civil Engineering,	In association with Centre for Research & Education for Social Transformation (CREST), Kozhikode, 22 nd December to 28 th December 2012 – under TEQIP II
2	Dr. S Mathava Kumar	Faculty Development Programme (FDP) on "Emerging Contaminants: Analysis, Fate, Treatment and Modelling",	09th to 13th July, 2012 at NIT Calicut, Kerala, India.
3	Dr. N Ganesan Dr. P V Indira	International Workshop on Sustainability and Advances in Concrete Technology (SACT 2012)	NIT Calicut during 7 - 8 th May 2012, 2012

(e) Expert Lectures delivered in Conferences/Seminars/Workshops

SI No	Name of Staff	Title of the Programme	Organisation
1	Dr. C Arun	Cost Reduction by Waste Management in Construction Sites	Laurie Baker Centre for Habitat Studies
2	Dr. C Arun	Sustainability in Project Management	BUILDMAT 2012, Coimbatore, India
3	Dr. T M Madhavan Pillai	"Design of Compression Members" in the course "Exposure Steel Code IS: 800-2007 (Third Revision)"	National Institute of Technical Teachers Training and Research (NITTTR), Kalamassery, Kochi, 14 th , September, 2012
4	Dr. K.Krishnamurthy	Transportation Related Air Quality Issues and Comprehensive Measures for Improvement in Small Cities	Kongu Engineering College Perundurai, 5 th May 2012
5	Dr. S Mathava Kumar	Nitrogenous Wastewater Treatment Technologies, AICTE sponsored SDP on "Waste to Energy",	KSR College of Engineering, Tiruchengode, 21 st May to 1 st June, 2012
6	Dr. S Mathava Kumar	Energy Minimization in Nitrogenous Wastewater Treatment, AICTE sponsored FDP on "Modelling & Simulation in Chemical and Environmental Engg."	Dept. of Chemical Engg., NIT Calicut. 28 th May to 1 st June, 2012.
7	Dr. S Mathava Kumar	Membrane Reactors for the treatment of Emerging Contaminants, AICTE sponsored FDP on "Emerging Contaminants: Analysis, Fate, Treatment and Modelling"	Dept. of Civil Engg., NIT Calicut. 09th to 13th July, 2012
8	Dr. S Mathava Kumar	Membrane-Photocatalytic Slurry reactor - A sustainable system for water purification, 1 st International Conference on Emerging Technologies for Clean Water	IIT Madras, 14 th to 16 th September, 2012 (<i>invited talk at Young Researchers Session</i>).
9	Dr. S Mathava Kumar	Wastewater Treatment using Membrane Reactors: Concepts and Applications, CSIR Sponsored FDP on "Advanced Membrane Bioreactors for Wastewater Treatment"	KSR College of Engineering & Technology, Tiruchengode, 16 th March, 2013
10	Dr. S Mathava Kumar	Membrane reactors for water and wastewater treatment, TEQIP-II Sponsored FDP on "Advanced Treatment Technologies for Water and Wastewater"	GCT Coimbatore, 18 th to 24 th March, 2013
11	Dr. N Ganesan	Keynote paper on 'Advances in Civil Engineering with focus on Construction Material' in the National Seminar on Sustainable Development and Modern Construction Methods'	Sree Budha Engineering College, Pandalam, Alleppy, Kerala State on 6 th July 2012

12	Dr. N Ganesan	Lecture on Applications of Ferrocement to the Construction Industry	29 th Sept 2012 at Kerala State Nirmithi Kendra, Trivandrum
13	Dr. N Ganesan	Lecture on Multistoried Buildings & NDT on RCC structures	Co-operative Institute of Technology, Vadakara on 9 th October 2012
14	Dr. N Ganesan	Inaugural address and presented a special Lecture on " Guidelines to seismic Resistant structures" in the STTP on Aseismic Design of Structures	Dept of Civil Engineering , Govt College of Engineering, Trichur on 11 th March 2013
15	Dr. N Ganesan	Invited Lecture on " Advances in Forensic Engineering and rehabilitation of Structures"	Govt College of Engineering, Kozhikode in the Faculty Development Programme on 21 st March 2013
16	Dr. P V Indira	International Workshop on Sustainability and Advances in Concrete Technology (SACT 2012)	NIT Calicut during 7 - 8 th May 2012, 2012
17	Dr. Sajith A S	"Structural Control- an overview" and "Structural control using Tuned Mass Dampers and Tuned Liquid Dampers" in STTP, "Asiesmic Design of Strucutes".	GEC Trissur on 12 th March 2013
18	Dr. T P Somasundaran	Introduction to Offshore Structures	Jan., 2013, SCMS College, Ernakulam
19	Dr. T P Somasundaran	Offshore Structures	Consulting Structural Engineers Forum, Calicut
20	Dr. T P Somasundaran	Forensic Engineering & Design of Structures	Jan., 2013, GRACE, Calicut
21	Dr. T P Somasundaran	Forensic Engineering & Design of Structures	On Engineers Day for PWD Engineers Forum, Calicut, 15 th Sept. 2012
22	Dr. T P Somasundaran	Advances in Bridge Engineering	PWD Engineers Forum, Calicut

(f) Details of Faculty, who acquired Higher Qualification:

Sri. Harikrishna M: Diploma in Transport Economics and Management, Institute of Rail Transport, New Delhi
Sri. Sajith A S: Doctor of Phylosophy, NIT, Calicut

(g) Consultancy and testing

Sl. No.	Client/Organisation	Revenue Earned (₹)	Status
1	Superintent of Police, CBI, ACB, Cochin	89888	Completed
2	The Muncipal Secretary, Cherthala.	37079	Completed
3	The Managing Director, Kerala Feeds Ltd., Kallatiin Kara, Thrissur	84270	Completed
4	The Secretary, Tirur Municipality, Trikandiyur (PO), Tirur - 676104.	168540	Completed
5	Asst. Executive Engineer, Fishery Harbour Project, Sub-Sub Division, Habour Engineering Dept., Koyilandy	15000	Completed
6	The Executive Engineer, Office of the Executive Engineer, BSP Division, Padijara thara.	168540	Completed
7	Projt Director, National High way authority of India Kalamassery, Eanakulam - 683 104	168540	Completed
8	The Execituve Engineer(Civil), Civil Construction Wing, AIR & TV, Kakkanad, Kochi	50,000	Completed
9	The Integral solutions, Cochin..	138281	Completed
	Total amount for consultancy carried out during 2012-2013	9,58,059	
10	Total amount for testing carried out during 2012-2013	5,50,800	Completed
	Grand Total	15,08,859	

(h) Participation in Conferences/Seminars/Workshops/other Training programmes

SI No	Name of Faculty	Title of the Programme	Duration and Period	Organisation
1	Dr. C Arun	Global Challenges in Construction Industry	28th- 30th June 2012	Colombo Srilanka
2	Dr. Kodi Ranga Swamy	Conference on "Deep Foundation Technologies for Infrastructure Development in India"	18 th – 19 th September 2012	DFI India organized two day conference, at IIT, Madras
3	Dr. S Mathava Kumar	1 st International Conference on Emerging Technologies for Clean Water	14 th to 16 th September, 2012	IIT Madras,
4	Dr. P V Indira	International Workshop on Sustainability and Advances in Concrete Technology (SACT 2012)	7 - 8 th May 2012, 2012	NIT Calicut
5	Dr. N Sankar	Two day workshop on "Outcome Based Accreditation", at Panimalar Engg. College, Chennai	16-17 September, 2012	National Board of Accreditation, New Delhi

DEPARTMENT OF COMPUTER SCIENCE & ENGINEERING

a. Publications

i. Journal

Name of the Author	Title of Paper	Name of Journal	Vol, Year, p.p.
Govindan V K Jyothisha J Nair	Speckle noise reduction using fourth order complex diffusion based homomorphic filter	Advances Computing and Information Technology- Advances in Intelligent systems and computing	Vol 177, pp 895-903, 2012
K A Abdul Nazeer, M P Sebastian, S D Madhu Kumar	A Novel Harmony Search- K means Hybrid Algorithms for Clustering Gene Expression Data"	Bioinformation Journal, Biomedical Informatics Publishers	Vol-9(2), 2013, 084-088
Govindan V K Sithara Kanakaraj, Pournami P N	A fast brain image registration using axial transform	Communications in Computer and Information science	2012, vol. 292, part 2, pp. 206-212
V K Govindan Aswin Sekhar T K	Enhanced approach for 3D model reconstruction from silhouettes	Communications in Computer and Information science	2012, vol. 292, part 2, 149-158
V K Govindan Jasmin T jose	Varying Area Based Shadow Detection in Video Sequences	Communications in Computer and Information Science 2013; LNCS	pp. 114–123, 2013
V K Govindan Vidya A S	Video Surveillance System for Security Applications	Communications in Computer and Information Science 2013; LNCS	pp. 70–79, 2013.
Govindan V K Lijya A Mumthas T K	Chromosome Classification using M-FISH Images	Communications in Computer and Information Science, LNCS	pp. 80–89, 2013
Govindan V K Rakhee M Baiju Karun	Enhancing the Precision of Walsh Wavelet Based Approach for Color and Texture Feature Extraction in CBIR by Including a Shape Feature,	Bulgarian Academy of Sciences Cybernetics And Information Technologies	Volume 13, No 2, 2013
V.K.Govindan Leena Silvester	Enhancement of CNN based EM image segmentation	Cybernetics and information technologies	Vol 12, No. xx, 2012
V K Govindan Sreejini K S Lijya A	M-FISH Karyotyping- A new approach based on watershed transform	IJCSEIT	2012
V K Govindan Bairagi Nath Behera	Improved Multimodal Biometric Watermarking in Authentication Systems Based on DCT and Phase Congruency Model	IJCSN International Journal of Computer Science and Network	Volume 2, Issue 3, June 2013; ISSN (Online): 2277-5420
V. K. Govindan Prasad Someswara Sathidevi P. S	Image quality augmented intramodal Automatic Palmprint authentication,"	Image processing, IET	vol 6, issue 6, Oct. 2012, pp. 668-676
Vinod Pathari, Rajendra Sonar,	"Identifying linkages between statements in information security policy, procedures and controls	Information Management & Computer Security	Vol. 20 Iss: 4, pp.2 – 280 (2012)

V K Govindan Rahna E	A Novel Technique for Secure, Lossless Steganography with Unlimited Payload and without Exchange of Stegoimage	International Journal of Advances in Engineering & Technology (IJAET)	Volume 6 Issue 3, pp.1263-1270, 2013.
Govindan V K Lijiya A Sreejithlal G S	M-FISH Image Segmentation and Classification using Fuzzy Logic	International Journal of Computer applications	vol. 70, No. 5, pp. 46-50, May 2013
Govindan V K Lakshmi Sasilal	Arithmetic Coding- A Reliable Implementation	International Journal of Computer applications (IJCA)	vol.73,No.7, ISBN:973-93-80876-07-5, 2013.
Govindan V K Vidya A S	Video Surveillance System for Security Applications	International Journal of Computer applications (IJCA)	vol. 74 , No. 1, ISBN:973-93-80876-31-6, 2013
V K Govindan Saumya Sadanandan	Image Compression with Modified Skipline Encoding and Curve Fitting	International Journal of Computer applications (IJCA)	vol. 74, No. 5, ISBN:973-93-80876-35-9, 2013
V K Govindan Jasmin T jose	Efficient Algorithm for Varying Area based Shadow Detection in Video Sequences	International Journal of Computer applications (IJCA), ISBN	973-93-80875-76-7; vol. 72, No. 16, June 2013
V.K. Govindan Pournami P.N Sithara Kanakaraj	registration using multi-resolution optimization for the early diagnosis of alzheimer's disease	International Journal of Computer Science and Electrical Engineering (IJCSEE)	2315-4209, Vol-1, Iss-2, 2012
Lijiya A Govindan V K Sreejithlal G S	M-FISH Image Segmentation Using Fuzzy Logic and Spatial Information; IRACST	International Journal of Computer Science and Information Technology & Security (IJCSITS)	Vol. 2, No. 6, Pages 1249-1253, December 2012
Govindan V K Lijiya A Sreejithlal G S	M-FISH Image Segmentation Using Fuzzy Logic and Spatial Information; IRACST	International Journal of Computer Science and Information Technology & Security (IJCSITS)	Vol. 2, No. 6, Pages 1249-1253, December 2012
V K Govindan Pournami P N Shaj G S	Threshold Accepting Approach for Image Registration	International Journal of Computer Science and its Applications	Vol.2, Issue 2, pp 88-92, 2012
V K Govindan Lijiya A, Sreejini K S	M-FISH Chromosome Images Classification by Watershed based Segmentation Approach	International Journal of Computer Science and its Applications	Vol.2 Issue 2, p 51-55, 2012
K.S.Sreejini, Lijiya.A, V.K.Govindan	"M-FISH Karyotyping a new approach based on Watershed Transform,	International Journal of Computer Science Engineering and Information Technology(IJCEIT), ,	Vol-2,No.2, 105-117April2012
V K Govindan Rahna E	A Novel Technique for Secure, Lossless Steganography with Unlimited Payload	International Journal of Future Computer Communication	Vol. 2,No. 6, pp. 638-64, : 2010-3751. DOI: 10.7763/IJFCC. 2013.V2.243
V. K. Govindan K. Santle Camilus	A Review on Graph Based Segmentation	International Journal of Image, Graphics and Signal Processing (IJIGSP)	2012, 5, 1-13
V K Govindan Leena Silvester	Convolutional Neural Network Generated Affinity Graph based Segmentation	International Journal of Information Processing	vol. 6, issue 1, pp. 67-75, 2012
Govindan V K Lijiya A Mumthas T K	Karyotyping of Human Chromosomes Using M_FISH Images	International Journal of management and information technology (IJMIT)	2013
V.K.Govindan Jereesh A.S.	A clonal based algorithm for the reconstruction of genetic network using S-System,"	International Journal of Research in Engineering and technology, eISSN: 2319-1163, pISSN:23212321-7308	Vol.2,Issue8, 2013.
V. K Govindan Saidalavi Kalady Abraham T Mathew	Mathematical Modeling and Experimental evaluation of Optimal Agendas and Procedures for N-Issue Negotiation	International Review on Computers and Software (I.RE.CO.S.)	Vol. 01, No. 02, 2013

Ranjith, P, Chandran P, Kaleeswaran S	On Covert Channels between Virtual Machines	Journal in Computer Virology, Springer	8(3):85-97
V K Govindan Jyothisha J Nair	Multi-scale Segmentation Based on Nonlinear Complex Dilution	Journal of Medical Imaging and Health Informatics, American Scientific Publishers.	Jun. 2013
V. K. Govindan Lakshmi Sasilal	Arithmetic Coding-An Enhanced Implementation Using Locality	Lecture Notes On Information Theory	Vol.1, No. 3, September 2013, ISSN : 2301-3788.
V K Govindan Saritha Murali	Shadow Detection and Removal From a Single Image Using LAB Color Space, in Cybernetics and Information Technologies	Print ISSN: 1311-9702; Online ISSN: 1314-4081; DOI: 10.2478/cait-2013-000	Volume 13, No 1, pp. 95-103, 2013
S D Madhu Kumar Anju K S, Asha, Mary J, Indu J, Subha N, Reshma Ann T	Virtual Machine Placement Based on VM- PM Compatibility	The Mediterranean Journal of Computers and Networks	8 (2): 35- 41 2012
V K Govindan Jyothisha J Nair	Automatic Segmentation Employing Fuzzy Connectedness, paper (ID 8331)	The International Review on Computers and Software (IRECOS),	2012

ii. International Conference

Name of the Author	Title of Paper	Name of International conference	Vol, Year, p.p.
Chandran P, Kumar MSD Shabeera, TP,	<u>Authenticated and persistent skip graph: a data structure for cloud based data-centric applications</u>	International Conference on Advances Computing, Communications and Informatics (ICACI 2012)	ACM(ISBN:978-1-4503-1196-0): 155-160
A. Lijiya K.S Sreejini and V.K. Govindan ,	M-FISH Chromosome Images Classification by Watershed based Segmentation Approach	in Proc. Of International conference on advances in Computer,Electrical and Electronics Engineering(ICACEEE-2012),25-27March,2012 ,Bombay,India	2012 ,pp.182-186.
S D Madhu Kumar Viju Poonthottam	A Dynamic Data Placement Scheme for Hadoop Using Real- time Access Patterns	International Conference on Advances computing, Communications and Informatics (ICACCI- 2013), Mysore	August 2013
S D Madhu Kumar Babitha Balachandran	Optimization of Reconfiguration Time During Client Movement on Siena	International Conference on Advances computing, Communications and Informatics (ICACCI- 2013), Mysore	August 2013
S D Madhu Kumar Reshmi G	An Adaptive Method for Node Revocation in Peer-to-Peer Networks	International Conference on Cloud Computing Technology and Management (ICCCTAM 12) Dubai, UAE	2012
S D Madhu Kumar Shabeera T P Chandran P	Authenticated and persistent skip graph: a data structure for cloud based data- centric applications	International conference on Advances in Computing, Communications and Informatics	155- 160, New York, NY, USA: ACM
Lijiya A, Sangeetha M. K, V.K. Govindan.	Segmentation and Classification of M-FISH Human Chromosome Images,	Second International Conference on Advances in Computing and Communications (ACC-2012),	Aug. 2012.
Sreenu Naik Bhukya ,S.Swathi G.Anjan Babu And R.SendhilKumar	Performance of ART1 Network in the Detection of Breast Cancer	2012 2nd International Conference on Computer Design and Engineering (ICCDE 2012)	vol. 49 (2012) © (2012) IACSIT Press, Singapore DOI: 10.7763/IPCS 2012.V49.19
Sreenu Naik Bhukya R ,G Anjan Babu and Sendhil Kumar	Feed Forward Network with Back Propagation Algorithm for Detection of Breast Cancer	The 8th International Conference on Computer Science & Education (ICCSE 2013)	April 26-28, 2013. Colombo, Sri Lanka

iii. National Conference

Name of the Author	Title of Paper	Name of National conference	Vol, Year, p.p.
Jayaraj P.B Ajay Joseph Thomas Aravind A.N Mohammed Hashir K.S. Syam Sankar	Fast Parallel Arithmetic Coding on GPU	National conference on emerging trends in computing(NCETIC)	June 13-15, 2013

b.Community Services

c.Other Academic and Administrative Services

Name of Staff	Academic and Administrative Services
Dr. Madhu kumar S.D	1.HOD- CSED 2.Member- Institute Research Committee and PTA Secretary 3.Administrative responsibility for CNC/CCC (as HoD, CSED) 4. Vice Chair- ACM Trivandrum Professional Chapter 5.IEEE Malabar Subsection- Publications and Web Support Chair 6.ACM DEBS 2014- Publicity Co-chair 7.ACM SAC 2014 Cloud Computing Track co-chair 8.IEEE International Conference- Recent Advances in Intelligent Computing Systems (RAICS 2013)- Big Data Track co-chair 9.National Conference on Emerging Trends in computing (NCETIC 13)- Advisory Committee 10.ADCONS'13 NITK- TPC Member 11. International Workshop on Service- Oriented Architecture and Cloud Computing (SOAC-2013)- Program Chair 12. ACM Goa Workshop on software Engineering- TPC member 13. International workshop on Virtualization and Cloud Computing (IWVCC 2014)- TPC Member 14. PTA Secretary
Dr Priya Chandran	.Programme Co-ordinator, M. Tech(CSE) and M. Tech(CSE(IS)), Member of Senate, BPGS and BUGS. Chairperson/ Member of several doctoral committees.
Dr. Vineeth Paleri	Ph.D Programme Co-ordinator, Professor In Charge- Institute Website, Member- Senate
Mr. Vinod Pathari	MCA Programme Co-ordinator
Dr. K. Murali Krishnan	BOG Member
Dr. Sudeep K S	Faculty-in-charge of DSS, CSED coordinator for NIT Sikkim
Ms.Pournami P.N.	Warden, Ladies Hostel .
Mr. Gopakumar G	Faculty in Charge, Campus Networking Centre
Dr. V. K Govindan	Dean(Academic), Member-Senate, BOAC Chairman, PTA President
Ms. Saleena N	Faculty Advisor, 2012 admission B.Tech students, In-Charge of examinations
Mr. K A Abdul Nazeer	Institute Level:(i) Currently serving as Associate Dean (Academic) (ii) Member, Board of Academic Council (iii) Member, Curriculum Revision Committee (iv) Member, Institute Level 'Anti Ragging Committee' (v) Member, Library Purchase Committee Dept. Level : (i) Faculty Adviser, M.Tech (CSE) (ii) Faculty in charge, Computational Intelligence Lab (iii) Faculty in charge, Biocomputing Research Lab Others : Member, Board of Studies in Computer Science and Engineering, University of Calicut

d.Conferences/Summer/Winter School/Short term Courses/ Workshops conducted

Sl.No	Title	Coordinators	Duration & Period
1	Two day ISTE workshop on "Aakash for Education", for teachers of NITC.	Dr.G.Gopakumar	10-11 November 2012
2	Four day workshop on "Aakash Android Application Programming" for Students of NITC	Dr.G.Gopakumar	23-24 February 2013 and 2-3 March 2013.
3	The MHRD/ AICTE Sponsored Faculty Development Programme on 'Bioinformatics- Algorithms, Databases and Tools'	Mr. K A Abdul Nazeer	4- 9 June 2012

4	The TEQIP-II Sponsored Workshop on 'Recent Trends in Biocomputing Research'	Mr. K A Abdul Nazeer	19 th April 2013
5	FDP on Image Processing	Dr. V K Govindan Ms. Pournami P N	One week, May 2013

e. Expert lecturers delivered in Conferences/Seminar/workshops

Sl. No.	Name of Staff	Title of the Programme	Duration and Period	Organization
1	Dr. Gopakumar G,	Invited Talk on Turing & Morphogenesis – Art, Pattern & Complexity	12th December 2012	Regl. Sc Centre and Planetarium Calicut, Kerala on in connection with Alan Turing Centenary celebrations.
2	Saleena N	Invited lecture on Theory of Computation	8 th October 2012	Govt. Engg. College, Kannur
3	Dr. S D Madhu Kumar	National Conference on Advances in Computational Intelligence and Computational Technology- 2013 (NCACICT- 2013), Trivandrum	June 2013	LBS College of Engg for Women, Trivandrum
		Current Research Trends in Cloud Computing	December 12	Regl Scce Centre Calicut
		National Conference at Trivandrum : ADCAP 12	July 2013	LBS College of Engineering for Women, Trivandrum
		National Conference on Software Engineering (NCSOFT), CUSAT	August 2013	Cochin University of Science & Technology
		Invited talks on Cloud Computing & cloud databases & advanced data structures	Between June 2012 & August 2013	IIST Trivandrum, NIT Karnataka, College of Engg, Trivandrum, IITMK Tvpm, Amrita University, Amritapuri and RIT Kottayam
3	Mr. K A Abdul Nazeer	Delivered two lectures at the MHRD/ AICTE sponsored Faculty Development Programme on 'Bioinformatics- Algorithms, Databases and Tools'	4 th - 9 th June 2012	Department of Computer Science & Engineering, NIT Calicut
		Delivered an expert lecture at the TEQIP- II Sponsored Workshop on 'Recent Trends in Biocomputing Research'	19 th April 2013	Department of Computer Science & Engineering, T K M College of Engineering
		Delivered an lectures at the MHRD/ AICTE sponsored Faculty Development Programme on 'Soft Computing Techniques'	28 th June 2013	Department of Computer Science & Engineering, NIT Calicut
		Delivered an expert lecture on Bioinformatics'	8 th October 2012	Govt. College of Engineering, Kannur

f. Details of Faculty, who acquired Higher Qualification:-

1. Mr. G Gopakumar Acquired Ph. D degree
2. Dr. Mansoor Allicherry, Bell Labs Scientist joined as Adjunct Associate Professor in the CSE Department.
3. Prof. Mathew J Palakal's term for Adjunct Professorship has been extended till September 2015.

g. Consultancy and testing

Sl. No	Nature of Service	Organization	Revenue earned	Status
1	Two week training on "Windows Server, SQL Server and Hardware Maintenance 29 th April 2013 to 3 rd May 2013 and 6 th May 2013 to 10 th May 2013..	officials of India Post, Government of India Conducted under the aegis of R & C wing of NITC	Total amount is Rs. 4,50,000/-	Completed
2	One week FDP on Algorithm Analysis and Design for Faculty Members of GEC Palakkad	GEC Palakkad CS & IT faculty	4,00,000	Completed

h. Patents acquired and filed: NIL

i. Student achievements

1. Mr. Tijo Jose, M.Tech CSE student got placement if Google USA with the highest ever salary for an NIT Calicut Student
2. Ayush Jaiswal , S6 B.Tech CSE student got DAAD WISE scholarship for internship at TU Darmstad Germany
3. Ayush Jaiswal ,S6 B.Tech (CSE), P. Reshma - S6 BTech (CSE) and Mevin M. Dominic - S4 BTech (CSE) got Summer Research Fellowship Program 2013, Indian Academy of Sciences.

Mr. Ayush Jaiswal, S6 B.Tech got Viterbi-India Program Award from University of Southern California
[NITC CSE team lead by Kartik Singhal got first prize in National Level "Capture the Flag" style ethical hacking contest held at Amrita University](#) during August 2012
 Ms. Shabeera T.P PhD student got two months internship at Bell Labs Bangalore

DEPARTMENT OF ELECTRICAL ENGINEERING

a. Publications / Journal (2012-13) :

Sl. No	Name of the Author	Title of paper	Name of Journal / Int. Conference/ National Conference	Publication Details
1	Ajay Babu; S. Ashok	Comparison of Battery Technologies for Hybrid Electric and Plug-in Hybrid Electric Vehicles	Internal Journal on Trends in Electrical Engineering	Vol 2, No 2, pp.1-10, 2012
2	Athul Ajith; Mija SJ	Brain Emotional learning based intelligent controller and its applications on CSTR	International journal of Advanced Electrical and Electronics Engineering	Vol.2, No.3, 2013,pp 122-128
3	Ismayil C; Sreeramakumar R; Sindhu T K	Comparative analysis if genetic algorithm and fuzzy logic based automatic generation control of multi area power system	International review on Modelling and simulations	Vol.6,No.1, Feb-2013
4	Kumarvel S; Ashok S	An optimal stand-alone biomass/solar-PV/pico-hydro hybrid energy system for remote rural area electrification of isolated village in Western-Ghats region of India	International Journal of Green Energy, Taylor & Francis	Vol 9, Aug 2012, pp: 398–408
5	M. Saritha, K. Paul Joseph, and T. Mathew Abraham	Automatic Interpretation of MRI Brain Images Using Probabilistic Neural Network	J. Med. Imaging Health Inf. 3, American Scientific Publishers	237-241 (2013)
6	Mija S. J; Susy Thomas	Design of optimal sliding mode controllers	J. Control and Intelligent Systems	Vol.40, No.2, 2012, pp.119-124
7	Shijoh V; M V Vaidhyan	Development of Non-Linear model and performance evaluation of model based controller and estimation for the efficient control of Thru-Tank hybrid System	International Journal for Computer Application	56(12). 17-29, Oct 2012
8	Thangavel Ananthan; M V Vaidhyan; M V Varghese	An FPGA-based controller design for servo actuator using Xilinx System Generator and HDL Co-Simulator	Journal of VLSI Design Tools and Technology	Vol.2, No.3(2012)
9	N. D. Asha and K. Paul Joseph	Linear and Nonlinear Analysis of Heart Rate Variability in Ventricular Tachycardia and Supraventricular Tachycardia	J. Med. Imaging Health Inf. ,American Scientific Publishers	294-300 (2013)
10	N. D. Asha and K. Paul joseph	Nonlinear indices of heart rate variability for differentiating arrhythmias	Mech. Med. Biol.,World Scientific	Vol.13, 1350061 (2013)
11	P Preetha; M Joy Thomas	Electro-thermal aging of Epoxy Nano-Composites	IEEE Transactions on Dielectrics and Electrical Insulations	Vol.19, issue 6, Dec12; pp 2081-2089
12	Rinu Alice Koshy; Susy Thomas	Control of Rotary Flexible Joint by Two-surface Discrete Sliding Mode Control based on Approach Angle Reaching Law	International Journal of Electronics Communication and Computer Engineering, ISSN (Online) 2249 –071X, ISSN (Print): 2278 – 4209	Volume 3, Issue 4.
13	Siny Paul; Sindhu T K	Optimization of electric energy density in epoxy- aluminium nanocomposites as dielectric	International Journal of Electrical Engineering and Technology	Vol.4, issue 1, pp36-45-Feb-2013
14	Subha D P; Paul K Joseph	Classification of EEG signals in normal and depression condition by ANN using RWE and signal entropy	Journal if Mechanics in medicines and Biology Vol 12, No.4	pp.1240019-1-1240019-13, 2012
15	Vasanthi V; Ashok S	Control of Harmonics in Electric traction system	International Review of Automatic Control EACO	Vol.5,N.4 ,July 2012

16	Rinu Alice Kozhy; Susy Thomas	A Two-surface Discrete Sliding Mode Control based on Approach Angle Reaching Law	Proceedings of The International Multi Conference of Engineers and Computer Scientists ,Mar 14-16, 2012	pp888-893
17	R Kunhimangalam, S Ovallath, PK Joseph	Artificial neural networks in the identification of peripheral nerve disorders	Journal of Mechanics in Medicine and Biology 12 (04)	
18	R Kunhimangalam, S Ovallath, K Paul Joseph	A novel fuzzy expert system for the identification of severity of carpal tunnel syndrome	Biomed Research International Journal.	
19	Neetu Mohan; Mukti Barai	Digital Voltage control of zero voltage switching of Buck Converter	Proceedings at IEEE, Region 10 Conference(TENCON-2012)	TENCON-2012
20	P Preetha; M Joy Thomas	Accelerated multi stress aging of polymer nano composites and its condition monitoring	Paper A-98, 2012, IEEE International Conference on condition monitoring and Diagnostics,	23-27 Sept 2012
21	Mohan N; Barai M	Digital Control of Zero Voltage Switching Buck converter using PIC Microcontroller	Proceedings of Power Electronics (IICPE), 2012, International Conference.	6-8 Dec 2012
22	Ismayil E K, Sindhu T K	Self-healing practice for a LT 11 kV overhead radial distribution feeder.	International conference on Power, Energy and control	Hyderabad, India, 2013.
23	Sunitha R, Sreerama Kumar R, Abraham T. Mathew and Veeresh P. Kosaraju	On-line Power System Static Security Assessment in a Distributed Computing Frame Work	Fourth International Conference on Advances in Communication, Network, and Computing – CNC 2013	22-23 Feb, 2013, Chennai, India.
24	Sreelekshmi R.S, Sunitha R	Analysis of Inverter Fed Microgrids For Different Modes Of Operation In Matlab/Simulink	International Conference on Electrical Engineering and Computer Science (ICEECS-2012) on.	7 th April, 2012,Goa, pp 86-90.
25	Shijoh V; Vaidhyan M V	Development of Generic dynamic Non linear model for continuous hybrid system and design of inverse dynamics controller and derivation free state estimation in presence of uncertainties	Automation, Computing Communication, Control and Compressed sensing (imac4s)	22-23 March 2013, Multi-Conference.
26	Anathan Thangavelu; Varghese MV; Vaidhyan M V	Novel FPGA based controller design platform for DC-DC Buck Converter using HDL Co-Simulator and Xilinx System Generator	2012 IEEE Symposium on Industrial Electronics and Application (ISFEA 2012)	23-26 Sept, 2012, Bandung, Indonesia.

b. Book Chapters:

Name of the Author	Title of Chapter	Name of Book	Publication Details
Mr. K.S. Suresh Kumar	-	Electric Circuit Analysis	Pearson Publications, ISBN-978-81-317-9155-4

C. Other Academic and Administrative services:

Sl. No	Name of Staff	Academic and Administrative Services
1	Dr. Jagadanand	Nodal Officer, TEQIP Phase II.
2	Dr. Kumaravel S	Warden B-Hostel
3	Dr. Kumaravel S	Branch counsellor, IEEE, NITC Chapter
4	Dr. Kumaravel S	Faculty in Charge, IPF Club
5	Dr. Rijil Ramchand	Deputy Chairman, PG Admissions
6	Dr. Rijil Ramchand	Associate Dean (R & C)
7	Dr. Sindhu T K	Nodal Officer, TEQIP Phase II.
8	Dr. Sindhu T K	Warden L.H
9	Dr. T.K SunilKumar	Deputy Chairman UG Admissions

a. **Conferences/ summer/ winter School/short term courses/workshops conducted:**

Sl. no	Title	Coordinators	Duration and Period
1	National Workshop on "Lab View & graphical applications"	Dr. S Ashok	16-17 Feb 2013
2	Workshop on Industrial Automation	Dr Ashok S	4-9 May 2012

b. **Expert lectures delivered in conferences/ Seminars/ Workshops**

Sl. No.	Name of staff	Title of the programme	Duration and Period	Organization
1.	Dr. S Ashok	Invited talk on Power Quality Issues due to Power Electronics Switching for the FDP on Recent advances in Power Electronics Systems	8 th Mar. 2013	GEC, Calicut
2.	Dr. S Ashok	Invited talk on Power Quantity Vs Power Quality for the National conference on Recent advances in Energy Conversion	9 th Feb. 2013	MIT Manipal
3.	Dr. S Ashok	Invited talk on PQ and smart grid for the Internal Conference on Energy Engg	18th Dec 2012	MBCE Trivandrum on International Conference on Green Technologies
4.	Dr. S Ashok	Conducted Tutorial on "Energy conservation in Pumps, STTP on Recent Advances in Energy Management	7 th Nov 2012	RIT Kottayam
5.	Dr. Kumaravel S	Applications of Artificial Neural Network in Engineering , FDP on Soft computing organized by Department of Mathematics	23 rd May 2012	National Institute of Technology, Calicut
6.	Dr. Kumaravel S	System Modeling and Simulation Using Artificial Neural Network , FDP on Modeling and Simulation, organized by Department of Chemical Engineering	28 th May 2012	National Institute of Technology, Calicut
7.	Dr. Kumaravel S	Applications of Artificial Neural Network in Engineering	27 th July 2012	Government College of Engineering Wayanad
8.	Dr. Kumaravel S	Application of Artificial Intelligence in Power Quality Issues ,DRDO Sponsored National Level Workshop on POWER QUALITY ISSUES AND IMPROVEMENT	28 th & 29 th Sep. 2012	Department of Electrical & Electronics Engineering, PSG College of Technology , Coimbatore
9.	Dr. Kumaravel S	Power Electronics applications in micro grid", TEQIP sponsored Faculty Development short course on Emphasis on Smart Operation and control of Power Markets using Power Electronic Components	19 th to 23 rd Nov. 2012	EEE department of Pondicherry Engineering College
10.	Dr. Kumaravel S	Distributed Generation for Microgrid", CSIR – Sponsored National Level Seminar On Integration of Distributed Power Generation Systems		Department of Electrical & Electronics Engineering, Pavai college of Technology Pachal, Namakkal, Tamilnadu

c. **Patents acquired and filed**

a. Details of faculty who acquired higher qualification

1. Dr. Kumaravel S, Ph.D.
2. Dr. Jagadanand G, Ph.D.

b. Consultancy and testing

Sl. No	Nature of service	Faculty involved	Organization	Revenue earned	Status
1	Power management of 300kVA UPS at ULSCS	Dr. S Ashok	ULSCS -Crusher plant, Areakode, Calicut	-	-
2	Testing of CFL & LED lights	Dr. S Ashok	Palakkad, Manjeri Municipalities	-	-
3	Testing of ACSR/ PILC cables	Dr. S Ashok	KSEB	-	-

c. Students' Achievements

Sl. No	Name of Student	Guidance	Field of Study	Nature of Achievement
1	Ajit Paul Abraham	Dr. S Ashok	M. Tech in Industrial Power And Automation	POSOCO Power System Award (PPSA-2013), conducted by IIT-Delhi

DEPARTMENT OF ELECTRONICS & ENGINEERING

a. Publications

i. Journal

Name of the Author	Title of the paper	Name of Journal	Vol, Year. PP
Elizabeth Elias James T. George	Continuously variable bandwidth sharp FIR filters with low complexity	Journal of Signal and information Processing	doi:10.4236/jsip.2012.33040, August 2012,3,308-315,
Elizabeth Elias, Byjubai. T. P	Image Quality assessment in Medical imaging based on Compressed Sensing" International Journal of Medical Engineering and Informatics	InderScience Publishers,	Vol. 4, No. 3, 2012, pp 262 - 273
Elizabeth Elias, Byjubai. T. P.	Sparse Regulation in Digital Medical Imaging" IRJSP,	International Research Journal of Signal Processing -	Vol. 03, Issue. 01, April 2012
Elizabeth Elias, Manju Manuel, Remya Krishnan	Design of Multiplier-less 2D sharp wideband filter using FRM and GSA	Global Journal of Research in Engineering. Electrical and Electronics Engineering;	Volume 12 Issue 5 Version 1.0 Print ISSN: 0975-5861, April 2012
Elizabeth Elias, Manju Manuel	Design of 2D multiplier-less Circularly Symmetric FIR filter using Harmony Search Algorithm and Frequency Transformation";	Journal of Signal and Information Processing (JSIP)	Vol. 3, Issue. 3, Version 1.0, April 2012.
Elizabeth Elias, Manju Manuel	Design of frequency response masking FIR filter in the Canonic Signed Digit space using modified Artificial Bee Colony algorithm	Engineering Applications of Artificial Intelligence, (Elsevier)	Volume 26 Issue 1, January, 2013 660-668
Elizabeth Elias., James T	Design of Multiplier-less Continuously Variable Bandwidth Sharp FIR Filters using Modified Gravitational Search Algorithm	International Journal of Computer Applications Published by Foundation of Computer Science, New York, USA.	Volume 62 - Number 12, January 2013.
Elizabeth Elias., Shaeen K	Design of Multiplier-less Cosine modulated Filters Banks with sharp transition using Evolutionary Algorithm	International Journal of Computer Applications Published by Foundation of Computer Science, New York, USA.	Volume 68 - Number 25, J 2013.

Elizabeth Elias, Manju Manuel	A Novel Approach for the design of 2D Sharp Circularly Symmetric FIR Filters	Global Journal of researches in engineering Electrical and electronics engineering Publisher: Global Journals Inc. (USA)	Volume 12 Issue 6 Version 1.0 May 2012
Harigovindan V.P, Babu A.V and Lillykutty Jacob	Ensuring Fair Access in IEEE 802.11p based Vehicle-to-Infrastructure Networks	EURASIP Journal on Wireless Communications and Networking	In Press
Ameer, P.M. and Lillykutty Jacob	Underwater Localization using Stochastic Proximity Embedding and Multi-Dimensional Scaling	Wireless Networks (WINET), Springer	Volume 19, Issue 7 (2013), Page 1679-1690
Ameer, P.M. and Lillykutty Jacob	Accurate Localization under Correlated Errors for Underwater Acoustic Sensor Networks	International Journal of Wireless Information Networks, Springer	In Press
Anzar S.M. and Sathidevi P.S	Optimal Score Level Fusion using Modalities Reliability and Separability Measures	<i>International Journal of Computer Applications (IJCA)</i> , Published by Foundation of Computer Science, New York, USA.	51(16): August 2012, p.p.1-8
Anzar S.M. and Sathidevi P.S.	An Efficient PSO Optimized Integration Weight Estimation Using D-prime Statistics for a Multibiometric System	International Journal on Bioinformatics and Biosciences (IJBB)	Vol.2, No.3, September 2012
Anzar S.M. and Sathidevi P.S.	Fusion of Biometric Modalities Using Multi-Normalization and Genetic Algorithm	International Review on Computers and Software (I.RE.CO.S.),	vol.7.No.6, ISSN 1828 - 6003, November 2012
Anzar S.M. and Sathidevi P.S	Adaptive score level fusion of fingerprints and voice combining wavelets and separability measures	International Journal of Electronics and Communications (AEU), Elsevier Journal	(2013) http://dx.doi.org/10.1016/j.aeue.2013.03.004 .
Anzar S.M. and Sathidevi P.S.	Optimal score level fusion combining multi-normalization and separability measures	Int. J. Applied Pattern Recognition IJAPR) @ Inderscience	(Accepted)
S.M. Prasad. V.K.Govindan , P.S. Sathidevi	Image quality augmented intramodal palmprint authentication	IET Image Processing,	Volume 6, Issue 6, August 2012, p.p. 668 – 676
K V Shahnaz & C k Ali	Performance of GA and PSO aided SDMA/OFDM over-loaded system in a near realistic fading environment	Wireless Engineering and Technology	Oct.2012,214-220
P.C. Neelakantan and A.V. Babu	Connectivity Analysis of One-dimensional Vehicular Ad Hoc Networks in Fading Channels	<i>Eurasip Journal on Wireless Communications and Networking(Springer open access)</i>	2012:1, DOI: 10.1186/1687-1499-2012-1
P.C. Neelakantan and A.V. Babu	Connectivity Analysis of Vehicular Ad Hoc Networks from a Physical Layer Perspective	<i>Springer Wireless Personal Communications</i>	Volume 71, Issue 1 (2013), Page 45-70, DOI: 10.1007/s11277-012-0795-z
P.C. Neelakantan and A.V. Babu	Network Connectivity Probability of Linear Vehicular Ad Hoc Networks on Two-way Street	Communications & Network	2012, 4, 332-341
P.C. Neelakantan and A.V. Babu	Computation of Minimum Transmit Power for Network Connectivity in Vehicular Ad Hoc Networks formed by Vehicles with Random Communication Range	Wiley International Journal on Communication Systems	2013, DOI: 10.1002/dac.2390.
V.P. Harigovindan, A.V. Babu and Lillykutty Jacob	Bit-based Fairness in IEEE 802.11p Vehicle-to-Infrastructure Networks	Springer LNCS Book Chapter	Volume 7135/2012, 328-337, DOI:10.1007/978-3-642-29280-4_39

V.P. Harigovindan, A.V. Babu and Lillykutty Jacob	Fairness Assurance Through TXOP Tuning in IEEE 802.11p Vehicle-to-Infrastructure Networks for Drive-Thru Internet Applications	Communications & Network	2013, 5, 69-83.
K.S. Deepak and A.V. Babu,	Improving Energy Efficiency of Incremental Relay based Cooperative Communications in Wireless Body Area Networks	Wiley International Journal on Communication Systems,	2013
Suja K J, Bhanu Pratap Chaudhary, Rama Komaragiri	Design and simulation of pressure sensor for ocean depth measurement	Applied Mechanics and Materials	Vols.313-314 , March 2013, pp 666-670.
Thafasalliyas V. P and Sameer S. M	A Hybrid Joint ML Technique for CFO, Timing Offset, and Channel Estimations in an OFDMA Uplink	International Journal on Communication Systems	Jul., 2012
Thafasalliyas V. P and Sameer S. M	A New Cramr-Rao Bound for Joint Estimation Problems”,	IET Electronics Letters	vol. 49, no. 6, Mar. 2013
Sudhish N G Deepthi P P	<i>Key Based Huffman Table for Multimedia Content Protection</i>	<i>Int. Journal of Multimedia and User design and User Experience</i>	vol.25, no.1, pp. 1103-1108, Mar 2013.
Sudhish N G, Arun Raj R, Deepthi P P	<i>An Efficient Multimedia DRM Technique using Secure Arithmetic Coding</i>	<i>Int. Journal of Computer Applications</i>	vol. 61, no. 17, pp 1-8., Jan. 2013
Celine M S, Nandan S Deepthi P P	Low Complex Crypto Based Channel Coding with Turbo Code	<i>Int. Journal of Computer Applications</i>	vol. 61, no. 16, pp. 39- 44, Jan. 2013.
Anoop B N, Sudhish N G, Deepthi P P	Secure Image Transcoding Technique Using Chaotic Key Based Algorithm	<i>Int. Journal of Advanced Computer Research</i>	vol. 2, no.4, pp: 84-88, Dec 2012
Suja K. J. ,Surya Raveendran, Rama Komaragiri	Investigation on better Sensitive Silicon based MEMS Pressure Sensor for High Pressure Measurement	International journal of computer applications	Vol 72– No.8, May 2013(0975 – 8887)
Bindiya. T. S, V. Sathishkumar, Elizabeth Elias	Design of Low power and Low Complexity Multiplier-less Reconfigurable Non-uniform Channel filter using Genetic Algorithm	Global Journal of Researches in Engineering – F (Electrical and Electronics Engineering),	Vol. 12, Issue. 6, May, 2012
Bindiya T. S., Elizabeth Elias	Design of Multiplier-less Reconfigurable Non-uniform Channel Filters using Meta- heuristic Algorithms	International Journal of Computer Applications	59(11):1-11, December 2012

iii. International Conference

Name of the Author	Title of the paper	Name of International Conference	Vol, Year. PP
Elizabeth Elias, Shaeen K	Modified ABC algorithm for the optimal design of multiplierless cosine modulated Filter banks	International Conference on Advanced Engineering Optimization through Intelligent Techniques (AEOTIT)	SVNIT, Surat July1-3, 2013 pp. 22-27
Elizabeth Elias, Kaka Radhakrishne, Nisha Haridas	Cuckoo Optimization Algorithm for the design of a sharp transition width Modified DFT filter bank.	International Conference on Advanced Engineering Optimization through Intelligent Techniques (AEOTIT)	SVNIT, Surat July1-3, 2013 pp. 56-60
Ameer P. M. and Lillykutty Jacob	Localization Using Stochastic Proximity Embedding for Underwater Acoustic Sensor Networks	NCC 2012	IIT Kharagpur

Cibile K K, Sameer S M, Lillykutty Jacob	"A New Method for the Computation of Exact Moments and Its Applications in Multihop Transparent Weibull Relay Channels,"	NCC 2013	IIT Delhi
Ceible K. K., Sameer S. M., and Lillykutty Jacob	On the Receiver Characterization Of Transparent Multi hop Relay Transmission Systems	IEEE 2013 TENCON – SPRING	Sydney
Mary Reena, Abraham T Mathew, Lillykutty Jacob	<i>Adaptive Dynamic model Prediction Algorithms for Stabilizing Time Delayed Networked Control Systems</i>	ICIUS 2013	Jaipur
Anzar S.M. and Sathidevi P.S.,	Optimization of Integration weights for a Multibiometric System with Score Level Fusion"	<i>Second International Conference on Advances in Computing and Information Technology (ACITY) Chennai, (India) Springer - Verlag Berlin Heidelberg 2012</i>	July 13-15, 2012, pp. 833-842
Anzar S.M. and Sathidevi P.S.,	Multi-normalization: A new method for improving biometric fusion	<i>International Conference on Advances in Computing, Communications and Informatics, (ICACCI) Chennai, (India), ACM New York</i>	August 5, 2012, pp.931-937,
Anzar S.M. and Sathidevi P.S.,	Fusion of Fingerprints and Voice using Multi-Normalization and Separability Measures"	<i>International Conference on Power Electronics, Systems and Applications (ICPESA'2012), Kualampur (Malaysia)</i>	August 25-26, 2012, p.p.205-209.
P.C. Neelakantan and A.V. Babu	Selection of Minimum Transmit Power for Network Connectivity in Vehicular Ad Hoc Networks	<i>2012 fourth International Conference on Communication Systems and Networks (COMSNETS 2012)</i>	2012, pp. 1-6
Ameenudeen P E and A.V. Babu	Performance Evaluation of Regular Cycle Non-Binary LDPC Codes in AWGN Channel	<i>2012 ACM International Conference on Advances in Computing, Communications and Informatics</i>	2012, pp. 1266-1270.
K.S. Deepak and A.V. Babu	Packet Size Optimization for Energy Efficient Cooperative Wireless Body Area Networks	<i>IEEE INDICON 2012</i>	2012, pp. 736-741
K.S. Deepak and A.V. Babu	Energy efficiency of IEEE 802.15.6 based wireless body area networks in scheduled access mode	<i>2013 IEEE International Conference on Advances in Computing, Communications and Informatics</i>	2013, pp.1006-1012
Rinnymol Babu and A.V. Babu	Resolving Rate Anomaly in IEEE 802.11p Multi-rate Vehicle-to-Infrastructure Networks Using TXOP Differentiation	<i>2012 ACM International Conference on Advances in Computing, Communications and Informatics</i>	2012 pp. 331-336.

V.P. Harigovindan, A.V. Babu and Lillykutty Jacob	Tuning Transmission Opportunity (TXOP) Limits for Providing Bit-based Fairness in IEEE 802.11p V2I Networks	2012 ACM International Conference on Advances in Computing, Communications and Informatics	2012, pp. 248-254
Surya Raveendran, Suja K J, Rama Komaragiri	Effect of Stacked Diaphragm in MEMS Pressure Sensors for Oceanographic Applications	6th International Conference on Sensing Technology ICST, Dec 18-21, 2012, Kolkata.	2012
Surya Raveendran, Suja K J, Rama Komaragiri	Finite element analysis on miniature silicon and SOI pressure sensors	INDICON, 7th -9th December 2012.	2012
N Kattabooman, Sarath S and Rama Komaragiri	VLSI Layout Based Design Optimization of a Piezoresistive MEMS Pressure Sensors Using COMSOL	COMSOL Conference, Bangalore, November 2012.	In Proceedings of the 2012 COMSOL Conference, Bangalore, November 2012.
Suja K J, Bhanu Pratap Chaudhary, Rama Komaragiri	Design and simulation of pressure sensor for ocean depth measurement	8th International Conference on Mems, Nano and Smart Systems ICMENS 2012, Oct 26-27,2012 Shatin, Hongkong .	2012
Aswathy M, Rama Komaragiri	Simulation Studies of Tunnel Field Effect Transistor	ICACC-2012, 9th -11th August-2012.	2012
Nitha M Biju, Rama Komaragiri	DG-JFET for Low Power Applications and Behaviour of it as a MOS Capacitor	ICACC-2012, 9th -11th August-2012.	2012
Cible K. K., Sameer S. M., and Lillykutty Jacob	Exploiting Second Order Statistics of the Received Signals in AF Relay Cooperative Network for Compound Channel Estimation	Proc. ACM International Conference on Advances in Computing, Communications and Informatics (ICACCI-2012)	Aug. 2012
Finto Raphel and Sameer S. M.	A Novel Modeling and Interim Channel Estimation Method for AF Cooperative Relay Systems	Proc. IEEE INDICON-2012	Dec. 2012
Muneer P. and Sameer S. M.	Doubly-selective Channel Estimation for OFDM Systems Using Bernstein Basis Polynomials and Kalman-tracking	Proc. IEEE INDICON-2012	Dec. 2012
Cible K. K., Sameer S. M., and Lillykutty Jacob	A Robust Channel Equaliser with Noise Correlation Subtraction for AF Relay Cooperative Networks	Proc. IEEE INDICON-2012	Dec. 2012
Kolla R. K, Sreelekha G	A perceptual adaptive quantizer for quality improvement of HEVC	7th IEEE International Conference on Industrial and Information Systems (ICIIS),	pp. 1-6, August 2012, IIT Madras, India
Raghu I., Deepthi P.P.	Multimodal biometric encryption using ridge and iris feature map	2012 IEEE Students' Conference on Electrical, Electronics and Computer Science (SCEECS)	pp 1 – 5, 01 Mar - 02 Mar 2012,
Nisha P K Nasarathul, Deepthi P P, Lalmohan K S	Design and Analysis of Stream Cipher of Low Hardware Complexity	International Conference on Communication Systems and Network Technologies (CSNT-2012)	pp. 858 – 862, May 2012.

Arun Raj R, Sudhish N. George, Deepthi P P	An expeditious Chaos based Digital Image Encryption	<i>Proceedings of IEEE International Conference on Recent Advances in Information Technology (RAIT – 2012)</i>	pp 14-18 March 16 - 17, 2012
Nandan S, Deepthi, P P, Celine M S	Low Complex Crypto Based Channel Coding	<i>2012 International Conference on Communication Systems and Network Technologies (CSNT- 2012)</i>	pp. 863-868, May 2012
Subeesh Vasu, Sudhish N George, Deepthi P P,	An Integrity Verification System for Images using Hashing and Watermarking	<i>IEEE International Conference on Communication Systems and Network Technologies (CSNT- 2012)</i>	pp 85-89, May 11 -13, 2012
Anoop B N, Sudhish N George, Deepthi P P	Secure Image Transcoding technique using chaotic key based algorithm with improved security	<i>IEEE, Int. Multi Conference on Automation, Computing, Control, Communication and Compressed Sensing (iMac4s)</i>	2013, pp. 693 - 697.
Athira A, Sudhish N G, Deepthi P P	<i>A Novel Encryption Method Based on Compressive Sensing</i>	<i>Int. Multi Conference on Automation, Computing, Control, Communication and Compressed Sensing</i>	2013, pp. 271 - 275.
<u>Mohamed Basheer, K.P. ;</u>	<u>Fingerprint attendance system for classroom needs</u>	<i>Annual IEEE India Conference (INDICON). 2012</i>	2012
<u>Philip, L. ; Rakesh, V.S. ; Sreesh, P.R. ; Hemalatha, N.R. ; Raghu, C.V.</u>	<u>Electronic water supply management system for educational institutions</u>	<i>2013 International Multi-Conference on Automation, Computing, Communication, Control and Compressed Sensing (iMac4s).</i>	2013
Suja k j Santo Mathew, Rama Komaragiri	Optimized Design of a Stacked Diaphragm MEMS Pressure Sensor for Tsunami Warning System	<i>IEEE GHTC-SAS2013</i>	2013 (Awaiting the proceedings)
Suja k j Vidya Gopal, Rama Komaragiri	Optimized Design of a Silicon based MEMS Pressure Sensor for Wider range and Better Sensitivity	<i>IEEE ICMIR 2013</i>	978-1-4673- 51492/13/\$31.00 ©2013 IEEE
Suja k j ,Surya Raveendran,Rama Komaragiri	Finite element analysis of miniature SOI pressure sensors for ocean depth measurement	<i>ICST 2012</i>	ICST 2012, Dec- 23-24
Anoop B N, Sudhish N George, Deepthi P P,	"Secure Image Transcoding technique using chaotic key based algorithm",	<i>International Journal of Advanced Computer Research</i>	Vo. 2 No.4 Issue-6 December-2012. pp: 84-88.
Neetha George, Sudhish N George, Apren T.J and Lal M.J,	Enhancement of Weak Sinusoidal Signals Using Advanced ALE Techniques", "	<i>(CSNT-2012)</i>	2012 April 6-8 2012.
Rakesh V S, Sreesh P R, Sudhish N George,	"An Improved Real-Time Surveillance System for Home Security System using BeagleBoard SBC, Zigbee and FTP Webserver",	<i>4th International Conference on Electronics Computer Technology (ICECT- 2012),</i>	2012, pp. 1240 – 1244

Ashna K, Sudhish N George	"GSM based automatic energy meter reading system with instant billing",	<i>Int. Multi Conference on Automation, Computing, Control, Communication and Compressed Sensing (iMac4s)</i>	2013, pp. 65 - 72.
Neetha George, Lal M J, Sudhish N George	""Digital tracking filter of FM-CW radar",	<i>IEEE Int. Multi Conference on Automation, Computing, Control, Communication and Compressed Sensing (iMac4s) -</i>	2013, pp. 636 - 640.
Shine P James, Sudhish N George, Deepthi P P,	Secure Selective Encryption of Compressed Audio”	<i>IEEE Int. Multi Conference on Automation, Computing, Control, Communication and Compressed Sensing (iMac4s)</i>	2013, pp 1-6.
Sudharsan Parthasarathy, Praveen Sankaran	A RETINEX based Haze Removal Method	<i>International Conference on Industrial and Information Systems(ICIIS), IIT Madras, India.</i>	August 6-9, 2012.

iii. National Conference

Name of the Author	Title of the paper	Name of National Conference	Vol, Year, PP
Sarath S and Rama Komaragiri	A comparative study of DC bridges and AC bridges in MEMS Pressure sensors	5 th ISSS National conference on MEMS, Smart Materials, Structures and Systems, 21 st -22 nd September 2012.	2012
Suja K J, Bhanu Pratap Chaudhary, Rama Komaragiri	Study of Diaphragm Architecture of a MEMS Pressure sensor to improve dynamic range	5 th ISSS National conference on MEMS, Smart Materials, Structures and Systems, 21 st -22 nd September 2012.	2012
Surya Raveendran, Suja K J, Rama Komaragiri	Finite element analysis on miniature silicon and SOI Pressure sensors	5 th ISSS National conference on MEMS, Smart Materials, Structures and Systems, 21 st -22 nd September 2012.	2012
Muneer P. and Sameer S. M.	Pilot Aided Joint Estimation of Doubly Selective Channel and Carrier Frequency Offset in High Mobility OFDMA Uplink	Proc. 19 th National Conference on Communications (NCC 2013)	Feb. 2013
Cible K. K., Sameer S. M., and Lillykutty Jacob	A New Method for the Computation of Exact Moments and Its Applications in Multihop Transparent Weibull Relay Channels	Proc. 19 th National Conference on Communications (NCC 2013)	Feb. 2013
Suja K J, Rama Komaragiri	Study on diaphragm architecture of a MEMS pressure sensor to improve dynamic range	Fifth ISSS-MEMS 2006	Sept 21-22, 2012
Suja K J, Surya & Rama Komaragiri	Finite element analysis on miniature SOI pressure sensors	Fifth ISSS-MEMS 2006	Sept 21-22, 2012

b. Community Services

Name of Staff	Community Service
Dr. Sameer S. M	<ul style="list-style-type: none"> Treasurer, IEEE Kerala Section Finance Chair, IEEE International Conference on Recent Advances in Intelligent Computational Systems (RAICS 2013)

c. Other Academic and Administrative services

Name of Staff	Academic and Administrative Services
Elizabeth Elias	<ul style="list-style-type: none"> NTS matters Ph.D Co-ordinator
Lillykutty Jacob	<ul style="list-style-type: none"> Coordinator, DST-FIST Project (To Strengthen the Post Graduate Teaching and Research in The Dept), Amount: 43.7L, Period: 2008-2013 Board of Governors, NIT Goa Board of Studies, NIT Surathkal Advisory Committee, AISAT Kochi NAAC Peer Team Member Reviewer for International journals: IEEE Trans. on Computers, IEEE Communication Letters, IEEE Trans. on Communications, IEEE Journal on Selected Areas of Communications, IEEE Trans. on Wireless Communications, IEEE Trans. on Vehicular Technology, IEEE Trans. on Mobile Computing TPC/Reviewer for International Conferences: IEEE INFOCOM, IEEE GLOBECOM, IEEE International Conference on Local Computer Networks (LCN), IEEE ICC SDLP Coordinator, IEEE Kerala Section
P. C. Subramaniam	<ul style="list-style-type: none"> FA of Sikkim 2010 batch B. Tech. ECE Class Committee Chairperson B.Tech. 2010 batch Faculty Advisor, B.Tech. 2010 batch
P.S. Sathidevi	<ul style="list-style-type: none"> HOD, ECED, NITC Board Member, Sahrdaya College of Engg. & Technology, Thrissur
G. Abhilash	<ul style="list-style-type: none"> Guided one M. Tech. Project Guided two B. Tech. Projects Guiding two M. Tech. Projects Guiding two B. Tech. Projects Serves as B. Tech. Project coordinator Serves as Doctoral Committee member to research students in various departments Serves as Member of the Advisory Committee for the Central Library Serves as Member of the Purchase Committee for the Central Library
C.K.Ali	<ul style="list-style-type: none"> Chairman CC 09 batch Warden C Hostel HOD ECED
A.V. Babu	<ul style="list-style-type: none"> Program Coordinator, M. Tech. Telecommunication Faculty -in-Charge of Laboratories: DST-FIST Lab, Telecommunication Technology Lab M. Tech. Admission (ECE) Coordinator - M.Tech (ECD) Major Project
Rama Komaragiri	<ul style="list-style-type: none"> Warden F-Hostel Faculty Advisor, M.Tech in Microelectronics and VLSI Faculty In-charge, Simulation Lab Faculty In-charge, NITC ISTE Student Chapter Faculty Member student guidance cell (ECED co-ordinator) Reviewer- IICPE2012, iMAc4s 2013, ICGITS 2013 Reviewer for the journal EPL, MNT Panel member CoreEL Diligent Design Contest (CDDC), South Zone PhD thesis examiner Question paper setter

Sameer S. M.	<ul style="list-style-type: none"> • Senate Nominee to the Board of Governors, NIT Calicut • Associate Dean (Planning and Development), NIT Calicut • Faculty Advisor, B.Tech (2011-15) batch • Member of several doctoral scrutiny committees • M. Tech M.Tech (Telecom) Project Evaluation Committee
Sreelekha G	<ul style="list-style-type: none"> • Faculty Advisor, B.Tech (2011 Batch) • Faculty -in-Charge of Laboratories: DSP Lab • In Charge of Staff amenities/Seminar Halls/Projectors • M.Tech. (ECE) Major Project Evaluation Committee member • Member -Anti Ragging Committee
Deepthi P.P.	<ul style="list-style-type: none"> • Associate Dean (FW) • Member of Women Complaint Cell • Timetable in-charge of Dept. • Program Coordinator of M. Tech (Signal Processing) • Lab in charge of IC lab • Coordinator of Project Evaluation Committee of M. Tech (Signal Processing)
Suresh R.	<ul style="list-style-type: none"> • Placement Committee Member • Faculty -in-Charge of SPCOM lab • Class Committee Chairperson, B. Tech. 20012 batch • Faculty Advisor, B. Tech . 2012 batch • Project Evaluation Committee (UG) member
Jaikumar M. G.	<ul style="list-style-type: none"> • Lab in charge VLSI Lab • Examination in charge Dept • Member of PG Project Evaluation Committee (VLSI) • Faculty Advisor B. Tech. 2012 batch
V.Sakthivel	<ul style="list-style-type: none"> • Faculty-in-charge of Electronic Circuits Lab • Member of UG project Evaluation Committee • Warden, PG-1 hostel (up to June 2012) • Member in Library Stock verification duty(May 2012) • Vigilance committee member in ECE Department • Observer for JEE(Main) 2013
Bhuvan B.	<ul style="list-style-type: none"> • Taught Analog MOS Integrated Circuits and handled EC3018 Electronics Circuits- Laboratory II during monsoon semester • Taught EC6227 Low power VLSI,EC 2021 Electronics Circuits I and handled EC6210 VLSI Design Lab during winter semester • Faculty in charge – VLSI lab • Faculty in charge –ECEA • Member, M.Tech (ECC) project committee • Co-coordinator, SMDP • Guided four B.Tech major projects
Raghu C. V.	<ul style="list-style-type: none"> • Jt. Secretary/Treasurer CREC PTA • Program Co-ordinator; M.Tech. Electronic Design and Technology • Faculty -in-Charge of Laboratories: PSoC Lab • Department Library in-charge • Coordinator - M.Tech (ECB) Major Project
Bindya T. S.	<ul style="list-style-type: none"> • Faculty Advisor, B.Tech (2009 Batch)
Ameer P. M.	<ul style="list-style-type: none"> • Faculty Advisor, B.Tech (2010 Batch) • Faculty -in-Charge of Laboratories: Communication Lab.
Jayakumar E. P.	<ul style="list-style-type: none"> • Faculty Advisor, B.Tech. (2010 Batch)
Sudhish N. George	<ul style="list-style-type: none"> • M.Tech Project Guidance (5 Nos) • Stock Verification (EED) • Anti-ragging duty • Faculty Advisorship • Dept. Amenities in charge • Dept. Exam coordinator • PG project Evaluation (ECB) • CAS food/transportation committee member
Praveen Sankaran	<ul style="list-style-type: none"> • Warden – UG Flats

d. Conferences/Summer/Winter School/Short term Courses/Workshops conducted

Sl. No.	Title	Coordinators	Duration & Period
1	MEMS Workshop (Sponsored by ADA through NPMASS)	Dr. Rama Komaragiri	4 th -9 th June 2012

e. Expert lectures delivered in Conferences/ Seminars/ workshops

Sl. No.	Name of Staff	Title of the Programme	Duration & Period	Organization
1	Lillykutty Jacob	Nat. Conference on Emerging Technologies (NCET-2012)	20-21 July 2012	Govt. Engg College, Barton Hill , Trivandrum
2	P.S. Sathidevi	Talk on Wavelet Analysis during the Inauguration of ECE Association at KMCT College of Engg., Calicut	October 2012	KMCT
3	P.S. Sathidevi	Talk on Digital Speech Processing	December 2012	KMCT Women's Engg College, Calicut
4	A.V. Babu	Talk on "Security & Cooperation in Wireless Networks" in summer school on Networks and Information Security	27 March 2013	Indian Institute of Information Technology & Management- Kerala Trivandrum
5	Rama Komaragiri	"Low Power VLSI Design Aspects" in ETVECS-13	1 st and 2 nd March 2013.	Department of ECE, SreeNarayanaGurukulam College of Engineering, Kadayiruppu, Kolenchery
6	Rama Komaragiri	"Quantum Mechanics: Application to Semiconductor Device design", In 1 st Refresher Course in Physics and Electronics	4 th Feb. 2013.	UGC ASC- University of Calicut
7	Rama Komaragiri	Microelectronics Processing Technology", In 1 st Refresher Course in Physics and Electronics	4 th Feb. 2013	UGC ASC- University of Calicut, 4 th Feb. 2013.
8	Rama Komaragiri	Introduction to CMOS Basic BuildingBlocks	31 st January 2013	KMCT for Women, Calicut
9	Rama Komaragiri	Beyond Moore Nano Electronics", STP on Design and Modeling of Advanced Analog and Digital Systems	26 th November 2012	Department of ECE of GEC Kannur
10	Rama Komaragiri	"Nano Electronics- Electrical characterization", FDP on CHARACTERIZATION TECHNIQUES IN NANOTECHNOLOGY	3 rd July 2012	School of Nano Science and Technology of NIT Calicut
11	Rama Komaragiri	Lecture series on "VLSI Testing and Verification"	May 2012	Department of Electronics Engineering, Pondicherry University
12	Raghu C. V.	Three day workshop on "Embedded Processors"	12-14 Oct 2012	JNTUH College of Engineering Kukatpally, Hyderabad
13	Raghu C. V.	Session on "High Speed Design issues" STTP on "Design and Modeling of Advanced Analog and Digital Systems"	29 th November 2012	Govt. College of Engineering, Kannur
14	Jayakumar E. P.	FDP on CMOS Design	3 hours Lecture and 3hours Lab on 27 and 28 of June 2013	NIT Calicut

f. Details of Faculty, who acquired Higher Qualification : NIL

g. Consultancy and Testing : NIL

h. Patents Acquired & Filed :

Sl. No.	Name of Staff	Title	Year
1	Dr. Sameer S. M.	A low complexity bandwidth efficient carrier frequency offset estimation technique for OFDMA uplink transmissions	2012

i. Student achievements :

1. A. S. Unde, Premprakash V. A., P. Sankaran, won the best paper award in Student Conference on Engineering and System, MNNIT Allahabad, India, 2012.
2. Many UG students are undergoing MS/PhD studies in higher educational institutes in India and abroad.

DEPARTMENT OF MECHANICAL ENGINEERING

a.Publications

i.Journal

Sl. No	Name of the Authors	Title of paper	Journal name	Volume, Page Nos., Year of publication
1.	Arun Venu A.K. and Arun P	Simulation Studies on Porous Medium Integrated Dual Purpose Solar Collector	International Journal of Renewable Energy Research	3(1), 114-120, 2013
2.	Sreejith C.C., Muraleedharan C., and Arun P.	Performance prediction of steam gasification of wood using an ASPEN PLUS thermodynamic equilibrium model	International Journal of Sustainable Energy	Available online, January 2013.
3.	Sreejith C.C., Muraleedharan C., and Arun P	Equilibrium modeling and regression analysis of biomass gasification	Journal of Renewable and Sustainable Energy	4(6), 063124, 2012.
4.	Sreejith C.C., Muraleedharan C., and Arun P	Thermo-chemical analysis of biomass gasification by Gibbs free energy minimization model-Part: II (Optimization of biomass feed and steam to biomass ratio)	International Journal of Green Energy	Volume 10, Issue 6, 2013.
5.	Sreejith C.C., Muraleedharan C., and Arun P	Energy and exergy analysis of steam gasification of biomass materials: a comparative study	International Journal of Ambient Energy	Volume 34, Issue 1, 2013
6.	Sreejith C.C., Muraleedharan C., and Arun P	Thermo-chemical analysis of biomass gasification by Gibbs free energy minimization model-Part: I (Optimization of pressure and temperature), International Journal of Green Energy	International Journal of Green Energy	Volume 10, Issue 3, 2013
7	Sudheer.A.P, Vijayakumar.R & Mohandas.K.P	Stable Gait Synthesis and Analysis of a 12-degree of Freedom Biped Robot in Sagittal and Frontal Planes.	Journal of Automation, Mobile Robotics and Intelligent systems. (International Journal)	Vol.6,No.4 Oct-Dec 2012, pp.36-44
8	Sreejith CC, Muraleedharan C, Arun P	Modelling of biomass thermo-chemical gasification process by Artificial Neural Networks	International Journal of Applied Engineering Research (RI Publications)	2012; 7(3): 313-320
9	M. R. Suresh Kumar, and V. Madhusudanan Pillai	Impact of weight assigned to objective functions in planning annualised hours	International Journal of Engineering and Management	Vol. 5, Issue 1, pp. 23–32, 2013
10	V. Baiju, C. Muraleedharan	Performance prediction of solar adsorption refrigeration system by ANN	Journal of Thermodynamics	Volume 2012, Article ID 102376, 8 pages, doi:10.5402/2012/102376

11	V. Baiju, C. Muraleedharan	Exergy assessment of solar adsorption refrigeration system by using artificial neural network	ISRN Journal of Mechanical Engineering	Volume (2012), Article ID 915154, 10 pages
12	Sreejith CC, Muraleedharan C, Arun P	Energy and Exergy Analyses of biomass materials: A comparative study	International Journal of Ambient Energy (Taylor & Francis)	2013; 34(1): 35-52.
13	Saleel, C., A., Shaija, A., and Jayaraj, S.,	On the use of Thermal Effects as a Measure to Control Electro-osmotic Flows in Micro-channels	International Journal of Micro and Nano Systems,	Vol. 3, No. 1, 2012, pp. 37-48.
14	Saleel, C., A., Shaija, A., and Jayaraj, S	On Simulation of Backward Facing Step Flow using Immersed Boundary Method	American Journal of Fluid Dynamics	2013, 3(2): 9-19
15	Sreejith CC, Muraleedharan C, Arun P	Life cycle assessment of producer gas derived from coconut shell and its comparison with coal gas – An Indian perspective	International Journal of Energy and Environmental Engineering (Springer)	2013; 4: A8.
16	V. Madhusudanan Pillai, K. Lavanya and T. Chinna Pamulety	Bullwhip effect analysis using supply chain role play game and ranking of supply chains	International Journal of Procurement Management	Currently available in the forthcoming issues of this journal
17	Sreejith CC, Muraleedharan C, Arun P	Performance prediction of air-steam gasification using experimental data-based correction models.	Biomass Conversion and Biorefinery (Springer)	2013; DOI: 10.1007/s13399-013-0083-5
18	V. Baiju, C. Muraleedharan	ANN modelling of adsorbent bed in solar adsorption refrigeration system	Proceedings of Institution of Mechanical Eng, Journal of Mechanical Engineering	Volume 227, February 2013, 346-358
19	Baiju.V, C. Muraleedharan	Energy and exergy analysis of solar hybrid adsorption refrigeration system	International Journal of Sustainable Engineering	DOI: 10.1080/19397038.2012.752052
20	Baiju.V, C. Muraleedharan	Application of neural network for the performance prediction of solar hybrid adsorption refrigeration system	International Journal of Engineering Research and Technology	Vol. 2 Issue 1, January 2013
21	Sreedhar Babu K., Prabhakaran Nair, K. and Rajendrakumar P.K.,	Analysis of Static and Dynamic Performance Characteristics of THD Journal Bearing Operating Under Lubricants Containing Nanoparticles	International Journal of Precision Engineering and Manufacturing	Vol. 13, No. 10, (2012), pp. 1869-1876
22	Sreedhar Babu K., Prabhakaran Nair, K. and Rajendrakumar P.K.	Numerical analysis of thermohydrodynamic journal bearing operating under commercial lubricant SAE15W40 containing weight fraction of CuO, CeO ₂ and Al ₂ O ₃ nano particles.	Journal of Tribology and surface Engineering	Vol. 3, No. 1-2, 2013, pp. 13-30
23	Bipin Balaram, Narayanan, M.D. and Rajendrakumar P.K.	Optimal design of multi-parametric nonlinear systems using a parametric continuation based Genetic Algorithm approach	Nonlinear Dynamics	Vol. 67, Issue 4, (2012) pp. 2759–2777
24	Manu V. Thottackkad, Rajendrakumar P.K. and Prabhakaran Nair, K.	Experimental Evaluation on the Tribological Properties of Coconut Oil by the Addition of CuO Nanoparticles	International Journal of Precision Engineering and Manufacturing	Vol. 13, No. 1, (2012), pp. 111-116
25	M. Srinivas and S. Jayaraj	Modeling and simulation of a double pass, hybrid -type (PV/T) solar air heater with slats	International Journal of Energy and Technology	Volume 4, 1-10, 2012

26	M. Srinivas and S. Jayaraj	Energy and exergy analysis of a Two pass photovoltaic thermal (PV/T) air heater	International journal of Energy and Environment	Volume 4 , Issue 3, 467- 480, 2013
27	M. Srinivas and S. Jayaraj	Investgations on the performance of a double pass, hybrid – type (PV/T) solar air heater	international journal of Energy and Environment	Volume 4 , Issue 4, 687- 698, 2013
28	Jayakumar, Jose Mathew, M. A. Joseph and, R. Suresh K	Processing and end milling behavioural study of A356-SiCp Composite	Materials Science Forum	Vol. 710, 2012, pp 338-343.
29	K. Jayakumar, Jose Mathew and M. A. Joseph	Analysis and Prediction of End Milling Characteristics of Al-SiCp Metal Matrix Composite Using RSM and ANN	J. Manuf. Sci. Prod.,	Vol. 12, 2012, pp. 105–110
30	K Jayakumar, Jose Mathew, M A Joseph, R Sureshkumar, A K. Shukla and M G Samuel	Synthesis and Characterization of A356-SiCp Composite Produced through Vacuum Hot Pressing	Materials and Manufacturing Processes	DOI:10.1080/10426914.2013.773012.
31	K. Jayakumar, Jose Mathew and M. A. Joseph	An investigation of cutting force and tool-work interface temperature in milling of Al-SiCp metal matrix composite	Journal of Engineering Manufacture	227 (3) 362-374, 2012.
32	T.J.S. Jothi and K. Srinivasan	Transonic resonance tones in orifice and pipe jets	International Journal of Aeroacoustics	vol. 12, No. 1+2, pp.103-122, 2013
33	T.J.S. Jothi and K. Srinivasan	Surface roughness effects on noise from pipe jets	Journal of Sound and Vibration	vol. 332, No. 4, pp. 839–849, 2013
34	K. Srinivasan, T. Sundararajan, S. Narayanan, T.J.S. Jothi, C.S.L.V. Rohit Sarma	Acoustic Pyrometry in Flames	Measurement	vol. 46, No. 1, pp. 315-323, 2013
35	Arunkumar O.N. and Radharamanan, T.,	Working Capital Management and Profitability: An Empirical Analysis of Indian Manufacturing Firms	International Journal of Management (IJM)	Volume 4, Issue 1, pp. 121-129, January- February 2013
36	Nadiya M & Radha Ramanan T.	Assessing the Efficient and Sustainable Performance of Indian MFIs.	Cost Management.	Volume 26(5), pp. 6-20, September/ October 2012
37	Arunkumar O.N. and Radharamanan, T	Analysis of Effects of Working Capital Management on Corporate Profitability of Indian Manufacturing Firms	International Journal of Business Insights and Transformation	Volume 5 (1), pp 71-76. October 2011-March 2012.
38	Saleel, C., A., Shaija, A., and Jayaraj, S.,	Computational Simulation of Fluid Flow over a Triangular Step using Immersed Boundary Method	International Journal of Computational Methods	August 2013, Vol. 10, No. 04
39	Panicker, V.V., Ratnaji, V. and Sridharan, R.	Ant Colony Optimization Algorithm for Distribution-Allocation Problem in a Two-Stage Supply Chain with a Fixed Transportation Charge.	International Journal of Production Research	Vol. 51, No. 3, pp. 698–717, 2013.
40	M. R. Suresh Kumar, and V. Madhusudanan Pillai	An efficient method to reduce relative capacity shortage using annualised hours planning	International Journal of Advanced Manufacturing Technology	Vol. 65, Issue 1-4, pp. 571–580, 2012
41	Reddy, M. V., Panicker, V.V. and Sridharan, R.	Ant Colony Optimization for location routing problem and its application to bill delivery services.	International Journal of Logistics Systems and Management	Vol.14, No. 1, pp. 1-37, 2013.
42	Saleel, C., A., Shaija, A., and Jayaraj, S.,	Computational Simulation of Electro-osmotic flow Using Immersed Boundary Method,	International Journal of Micro-Nano Scale Transport,	2012.
43	Vanchipura, R. and Sridharan, R.,	Development and analysis of constructive heuristic algorithms for flow shop scheduling problems with sequence-dependent setup times	International Journal of Advanced Manufacturing Technology	Vol. 67, Nos. 5-8, pp.1337-1353, 2012

44	Vanchipura, R. and Sridharan, R.,	Effect of Varying Levels of Setup Time on Makespan Criteria: A Comparative Study of Two Algorithms on SDST Flow Shop	Global Journal of Flexible Systems Management	Vol. 13, No. 3, pp. 151-158, 2012
45	Vanchipura, R. and Sridharan, R.,	Impact of varying levels of setup time on the performance of algorithms for scheduling a flow shop with sequence dependent setup time	International Journal of Services and Operations Management	Vol. 14, No. 4, pp. 421-444, 2013
46	Vanchipura, R. and Sridharan, R.,	Development and analysis of hybrid genetic algorithms for flow shop scheduling with sequence dependent setup time	International Journal of Services and Operations Management	In press
47	Vanchipura, R. and Sridharan, R.,	Effect of problem size on performance of constructive algorithms for flow shop scheduling problems with sequence dependent setup times	International Journal of Internet Manufacturing and Services	In press
48	Vinay, V.P., and Sridharan, R	Taguchi method for parameter design in ACO algorithm for distribution-allocation in a two-stage supply chain	International Journal of Advanced Manufacturing Technology	Vol. 64, No. 9-12, pp. 1333-1343, 2013
49	Reddy, M.V., Panicker, V.V., and Sridharan, R	Ant colony optimisation for location routing problem and its application to bill delivery services	International Journal of Logistics Systems and Management	Vol. 14, No. 1, pp. 1-37, 2013
50	Varaprasad, G., Sridharan, R., and Unnithan	Internet banking adoption in a developing country - an empirical study	International Journal of Services and Operations Management	Vol. 14, No. 1, pp. 54-66, 2013
51	Joseph, O.A and Sridharan, R	Effects of Flexibility and Scheduling Decision Rules on the Performance of an FMS: Simulation Modelling and Analysis	International Journal of Production Research	Vol. 50, No. 7, pp. 2058-2078, 2012
52	Panicker, V.P., Sridharan, R., and Ebenezer, B	Three-Stage Supply Chain Allocation with Fixed Cost	Journal of Manufacturing Technology Management	Vol. 23, No. 7, pp. 853-868.,2012
53	John, L., Ramesh A., and Sridharan R	Humanitarian Supply Chain Management: A Critical Review	International Journal of Services and Operations Management	Vol. 23, No. 7, pp. 853-868.2012
54	Vinay, V.P., and Sridharan, R	Development and analysis of heuristic algorithms for a two-stage supply chain allocation problem with a fixed transportation cost	International Journal of Services and Operations Management	Vol. 12, No. 2, pp. 244-268, 2012
55	G.Varaprasad, Kailas Sree Chandran, R. Sridharan, Anandakuttan B. Unnithan	An Empirical Investigation on Credit Card Adoption in India	International Journal of Service Science	Vol. 4, No. 1, pp. 13-29, 2013
56	Jayakumar K., Mathew J. and Joseph M.A.	Effect of Process Parameters on Surface Roughness and Cutting Force During End Milling of Al A356-SiCp Metal Matrix Composites,	Int. J. Mater. Sci. Technol.	Vol. 6, pp. 11-24.,2012.
57	Somashekar, K. P.,Panda, S., Ramachandran, N, Jose Mathew	"Numerical Simulation of Micro-EDM Model with Multi-Spark"	International Journal of Advanced Manufacturing Technology.	Accepted for publication

ii. International and National Conference

Sl. No	Name of the Author	Title of Paper	Name of International conference	Vol, Year, p.p.
1	P.C.Sujith Babu, A.P.Sudheer, and M.D.Narayanan	Intelligent Cartesian Robot for Soft Material Cutting.	25 th AIMTDR (International)	Dec 2012 pp.921-925.
2	Noby Paul, A.P.Sudheer and M.D.Narayanan	Artificial Neural Network Based Intelligent Online Robot Tracking of Moving Object.	25 th AIMTDR (International)	Dec 2012 pp. 76-77
3	Varghese George and A.P.Sudheer	Dynamic Modelling , Simulation and Control of a 6 Degrees of Freedom Biped Robot	25 th AIMTDR (International)	Dec 2012 pp. 894-899.
4	P.C.Sujith Babu, A.P.Sudheer, and M.D.Narayanan	Intelligent Cartesian Robot for Soft Material Cutting.	25 th AIMTDR (International)	Dec 2012 pp.921-925.
5	Noby Paul, A.P.Sudheer and M.D.Narayanan	Artificial Neural Network Based Intelligent Online Robot Tracking of Moving Object.	25 th AIMTDR (International)	Dec 2012 pp. 76-77
6	Baiju.V, and C. Muraleedharan	ANN Modelling of Two Stage Solar Adsorption Refrigeration System	Proceedings of International Conference on Modelling, Optimization and Computing (ICMOC), Noorul Islam University,	April 2012
7	Baiju.V, and C. Muraleedharan.	Investigations on Two Stage Activated Carbon-R134a Solar Assisted Adsorption Refrigeration System	International Conference on Mechanical, Nanotechnology and Cryogenics Engineering (ICMNC'2012), Kuala Lumpur (Malaysia).	August 2012
8	M. Srinivas and S. Jayaraj	Energy and exergy analysis of a two pass hybrid type (PV/T) solar air heater	ICEI 2012, Malaysia	Volume 3, 2012
9	Allesu K; Jose Mathew; Somasekar; Sravani; Naidu and Suvin	Estimation of residual stress and crater shape in micro-EDM by FEM	ASME 2012 International Mechanical Engineering Congress ; Houston, USA	Page No: 248 Session 3.33-2 2012
10	Kuriachen; Naidu; Jose Mathew; and Allesu	Modeling of micro EDM parameters on machining of aerospace alloy	4 th International&25 th AIMTDR 2012 Kolkata, INDIA	Page No:1051-1055
11	Shahul Hameed K. K., Arunkumar O.N., and Radharamanan, T.,	"Financial Efficiency analysis of Transport Equipment Manufacturing Firms in India: A Data Envelopment Analysis Approach",	International Conference on Mechanical and Industrial Engineering (ICMIE)	Proceedings of ISBN: 978-93-82208-73-0, March 17, 2013.
12	Mohammed Ashfaq V and T. Radha Ramanan	Effectiveness of Top down and Bottom up strategies in Demand Forecasting"	International Conference on Mechanical and Industrial Engineering (ICMIE)	Proceedings of ISBN: 978-93-82208-73-0, March 17, 2013.
13	Ivan, N.M., Panicker, V.V., and Sridharan R., 2012.	Development of an ant colony optimization-based heuristic for multi-period distribution-allocation problem in a supply chain.	XVI Annual International Conference of the Society of Operations Management, Indian Institute of Technology (IIT) Delhi, New Delhi.	December 21-23, 2012.
14	Panicker, V.V., and Sridharan R., 2012.	Cuckoo improved ant colony hybrid heuristic for the distribution-allocation supply chain model.	Third Biennial Supply Chain Management Conference 2012, Indian Institute of Management (IIM) Bangalore, Karnataka.	December 14-15, 2012.

15	Panicker, V.V., and Sridharan R., 2012.	Modelling and analysis of location-routing problem in a two-stage supply chain.	4th International and 25th All India Manufacturing Technology Design and Research (AIMTDR-2012) Conference, Jadavpur University Kolkata, West Bengal.	December 14-16, 2012.
16	Jabir, E., Panicker, V.V., and Sridharan R.	Modelling and analysis of capacitated location-routing problem in a single-stage supply chain using cuckoo optimization algorithm.	First International Conference on Best Practices in Supply Chain Management (BPSCM), SOA University, Bhubaneswar, Orissa.	November 22-23, 2012.
17	Panicker, V.V., and Sridharan R.	Developing a Hybrid Algorithm for Distribution-Allocation Problem in a Two-stage Supply Chain with a Fixed Cost.	International Conference on Emerging Trends in Manufacturing Technology, ToC H Institute of Science and Technology, Ernakulam, Kerala.	September 05-06, 2012.
18	Vipin, B., Panicker, V.V., and Sridharan R.	Transformation process in engineering education: A holistic approach.	International Conference on Engineering Education: Innovative Practices and Future trends (AICERA 2012), Amal Jyothi College of Engineering, Kanjirappally, Kerala.	July 19-21, 2012.
19	Vinod V. and R. Sridharan	Simulation-based analysis of due-dateassignment methods and scheduling decision rules in a dynamic job shop with sequence dependent setup times	International Simulation Conference of India (ISCI), February 21 – 23, 2013, IIT Madras, India.	-
20	Vinod V. and R. Sridharan	Simulation-based analysis of due-dateassignment methods and scheduling decision rules in a dynamic job shop with sequence dependent setup times	(inc@mtTRENDS12), Toc H Institute of science and technology, Arakkunnam, Kerala, India	-
21	Balakrishnan,P. and Sridharan, R	Revenue Management of a supply chain with reverse flows	Best Practices in Supply Chain Management (BPSCM-2012), 22-23, November 2012, Bhubaneswar, Odisha, India.	-
22	Muthu Kumar R , Varaprasad G, and Sridharan R	An innovative Proposal to increase the efficacy of the Automated Teller Machine using Mobile Banking	4 th International Conference on Intelligent Human Computer Interaction, December 27-29, 2012, IIT Kharagpur, India.	India, December 27-29, 2012, pp. 95-100.
23	Vanchipura, R. and Sridharan, R	A hybrid genetic algorithm for flow shop scheduling with sequence dependent setup time	(inc@mtTRENDS12), Toc H Institute of science and technology, Arakkunnam, Kerala, India	September 5-6, 2012.
24	Vanchipura, R. and Sridharan, R	A discrete particle swarm optimization algorithm for flow shop scheduling with sequence dependent setup time	54 th National Convention of Indian Institution of Industrial Engineering and International Conference 2012, Banagalore,	October 29-31, 2012, IIIE12-16
25	Vanchipura, R. and Sridharan, R	A robust design of a discrete particle swarm optimization algorithm for flow shop scheduling with sequence dependent setup time	Proceedings of the 12 th International Consortium of Students in Management Research COSMAR 12, Department of Management Studies, Indian Institute of Science, Bangalore	November 16-17, 2012.
26	Vanchipura, R. and Sridharan, R	Effect of problem size on performance of constructive algorithms for flow shop scheduling problems with sequence dependent setup times	4 th International and 25th AIMTDR, Jadavpur University, Kolkatta	December 14-17, 2012, pp 1228-1233

27	Vanchipura, R. and Sridharan, R	Application of neighborhood search technique for a constructive heuristic algorithm for scheduling a flow shop with sequence dependent Setups time	National Conference on Modern Trends in Mechanical Engineering (MTIME'12), Sree Narayana Gurukulam College of Engineering, Kadayiruppu, Kolenchery, Ernakulam 682311, Kerala, India	June 14- 16, 2012, pp. 34-40.2012
28	Panicker, V.V., and Sridharan R	Developing a Hybrid Algorithm for Distribution-Allocation Problem in a Two-stage Supply Chain with a Fixed Cost	International Conference on Emerging Trends in Manufacturing Technology (INC@mtTrends '12), ToCh Institute of Science and Technology, Ernakulam, Kerala	September 05-06, 2012.
29	Panicker, V.V., and Sridharan R	Cuckoo improved ant colony hybrid heuristic for the distribution-allocation supply chain model	Third Biennial Supply Chain Management Conference 2012, Indian Institute of Management (IIM) Bangalore,	December 14-15, 2012.
30	Panicker, V.V., and Sridharan R	Modelling and analysis of location-routing problem in a two-stage supply chain	4th International and 25th All India Manufacturing Technology Design and Research (AIMTDR-2012) Conference, Jadavpur University Kolkata	December 14-16, 2012
31	R. Kishore Kumar, and R. Sridharan	Modeling and Analysis of Order Picking in a Warehouse	3rd International Conference on Production and Industrial Engineering (CPIE-2013), 29-31, March 2013, NIT Jalandhar, India.	pp. 459 – 467.
32	Sajan T. John, R. Sridharan, and R. Kishore Kumar	Modelling and analysis of network design for a reverse supply chain	Conference on Production and Industrial Engineering (CPIE-2013), 29-31, March 2013, NIT Jalandhar, India.	March 29-31, 2013 4 pp. 452-45852
33	Ivan, N.M., Panicker, V.V., and Sridharan R., 2012.	Development of an ant colony optimization-based heuristic for multi-period distribution-allocation problem in a supply chain.	XVI Annual International Conference of the Society of Operations Management, Indian Institute of Technology (IIT) Delhi, New Delhi.	December 21-23, 2012.
34	S. Sreejith, M. Mubarak, A. Shaija, T.V. Suchitra	Experimental study on the properties of biodiesel produced from indigenous algae as diesel engine fuel	International conf. on Alternate fuels in I.C. Engines MNIT Jaipur	-
35	S. Mithun, M. Mubarak, A. Shaija, T.V. Suchitra,	Experimental investigation of biohydrogen production from Indigenous algae and Chlorella Pyrenoidosa	IEEE International Conf. on Energy Efficient Technologies for Sustainability ICEETS-2013	-
36	Salumuri. S. Lingeswara Rao, A.Shaija,	Mathematical Modeling and Performance analysis of Proton Exchange Membrane fuel cell,	IEEE International Conf. on Power, Energy and Control (ICPEC), 2013.	-
37	Salumuri. S. Lingeswara Rao, A.Shaija,	Mathematical Modeling and Parametric analysis of Proton Exchange Membrane fuel cells-A Semi Empirical Approach	International conf. on Alternate fuels in I.C. Engines, MNIT Jaipur, 2013	-
38	Saleel, C., A., Shaija, A., and Jayaraj, S.,	Numerical Simulation of Pressure Driven Electro-osmotic Flow and Mixing in a Rectangular Micro-Channel Populated with Triangular Blocks	39 th National Conference on Fluid Mechanics and Fluid Power, 2012, SVNIT, Surat, India	-

39	Suresh Kumar M. R., and Madhusudanan Pillai, V.	Planning annualised hours with upper bound of demand hours for different periods in a planning horizon	National Conference on Innovations and Emerging Trends in Mechanical Engineering, Nagarjuna College of Engineering & Technology, Bangalore	-
40	J. Laxmi Lalitha and V. Madhusudanan Pillai	Lot streaming in flow shop - Simulation using ARENA® software	International Conference on Challenges and Opportunities in Mechanical Engineering, Industrial Engineering and Management Studies, ICCOMIM-2012, M.S. Ramaiah Institute of Technology, Bangalore	-
41	V M Pillai, K Lavanya, and T C Pamulety	Bullwhip effect analysis in supply chains using supply chain role play game	First International Conference on Best Practices Supply Chain Management (BPSCM), SOA University, Bhubaneswar	-
42	Abhishek N., Nidhi, M. B., and V. Madhusudanan Pillai	Carbon assessment model for supply chain network	International Conference on Green Technologies-ICGT12, Mar Baselios College of Engineering and Technology, Thiruvananthapuram, and University of Dayton, USA, at Thiruvananthapuram	-
43	K. T. Shibin, M. M. Savarkar and V. Madhusudanan Pillai	Facility optimization using discrete event simulation – A case study	International Simulation Conference of India 2013, IITM Research Park, Chennai	-
44	Anoop G R Chandran, Nidhi M. B., and V. Madhusudanan Pillai	Modelling of closed-loop supply chain under the emission trading scheme	Tenth AIMS International Conference on Management, AIM-10, Indian Institute of Management Bangalore, Bangalore	-
45	Vinod Kumar P., V. Madhusudanan Pillai, Arun C., and Kiran Mohan	Time study for jobs in mahatma gandhi national rural employment guarantee scheme	Tenth AIMS International Conference on Management, AIM-10, Indian Institute of Management Bangalore, Bangalore	-
46	Jayakumar K., Jose Mathew and Joseph M.A.	Effects of SiC Particles Addition and Heat Treatment on Mechanical Properties of Al-SiCp Composite Made by Vacuum Hot Pressing	AIMTDR-December 14th-16th, 2012, Jadavpur University, Kolkata.	Vol. 1, Pp.199, 2012
47	Deepak G. Dilip, Basil Kuriachen and Jose Mathew	Multi-objective Optimization of Process Parameters in Vibration Assisted Micro-EDM	AIMTDR-December 14th-16th, 2012, Jadavpur University, Kolkata.	Vol. 1, Pp.1025, 2012
48	Kuriachen Basil, P. Prakash Naidu, Mathew Jose and K. Allesu	Modeling of Micro Edm Parameters on Machining of Aerospace Alloy	AIMTDR-December 14th-16th, 2012, Jadavpur University, Kolkata.	Vol. 1, Pp.1050, 2012
49	Shravani Srisailam, Basil Kuriachen, Eby Devid and Jose Mathew	Modelling and Multi Response Optimization of μ -WEDM	AIMTDR-December 14th-16th, 2012, Jadavpur University, Kolkata.	Vol. 1, Pp.1063, 2012
50	Kuriachen Basil, Dilip G. Deepak, M.S. Navaneeth and Mathew Jose	MRR Optimization of Inconel 718 in Low Frequency Work Piece Vibration Assisted Micro-EDM using RSM	AIMTDR-December 14th-16th, 2012, Jadavpur University, Kolkata.	Vol. 1, Pp.1085, 2012
51	Somashekhar K.P., Panda S., Jose Mathew and Ramachandran N.	Numerical Simulation of Micro-EDM Model with Multi-spark	AIMTDR-December 14th-16th, 2012, Jadavpur University, Kolkata.	Vol. 1, Pp.1090, 2012

52	Basil Kuriachen, Mithun S Nair, Jose Mathew	Numerical simulation of micro electric discharge machining on Ti-6Al-4V	CAE2013- December 19 – 21, 2013, IIT Madras	Accepted for publication
53	Jose Mathew, Deepak G Dilip, Mathew J Joseph, Basil Kuriachen	Finite Element Modeling of Discharge Zone in micro-edm Process	IMECE12(ASME2012)- November 9-15, 2012, Houston, Texas, USA	Vol. 3, Part B, pp. 1043- 1047, 2012
54	Jose Mathew, Allesu K., Shravani Srisailam, K.P. Somashekhhar, Prakash Naidu P., Suvin P. S.,	Estimation of Residual Stresses and Crater Shape in micro EDM by Finite Element Method	IMECE12 (ASME2012)- November 9-15, 2012, Houston, Texas, USA	Vol. 3, Part B, pp.1047-1052, 2012

b. Community Services – NIL

c. Other Academic and Administrative Service

Name of Staff	Academic and Administrative Services
Mr. Vinay V panicker	<ul style="list-style-type: none"> Faculty Advisor for 2010 B. Tech Mechanical Engineering Students (July 2010 – till date) Faculty in charge for Vehicle section, NIT Calicut (Dec 22, 2010 - Feb 13, 2013)
Dr. R. Sridharan	<ul style="list-style-type: none"> Journal of Operational Research Society (Referee) International Journal of Advanced Manufacturing Technology (Referee) International Journal of Production Research (Referee) International Journal of Production Economics (Referee) Simulation Modelling Practice and Theory(Referee)
Dr. Allesu Kanjirathinkal	<ul style="list-style-type: none"> Secretary Cum Treasurer of CREC Silver Jubilee Endowment Trust
Dr. M A Joseph	<ul style="list-style-type: none"> M. Tech. –Materials science and technology Course Coordinator Deputy Chairperson, UG Admissions MED Time table incharge Paper reviewer of IJMT
Dr. M.D. Narayanan	<ul style="list-style-type: none"> Convener, Academic Performance Review Committee, NITC, Aug-2012 to July 2013
Mr. Sudheer A.P	<ul style="list-style-type: none"> Faculty Advisor Department Web master Mechatronics/Robotics Laboratory Incharge
Dr. C. Muraleedharan	<ul style="list-style-type: none"> Staff-in-charge, MED Seminar library cum drawing office Member, MED Purchase committee Coordinator, M.Tech. Programme, Energy Engg. & Management Member, NITC Senate
Mr. P. V. MANU	<ul style="list-style-type: none"> Lab in charge for Heat Engines Laboratory Faculty Advisor for 2012 admissions Faculty Advisor for 2008 admissions M.Tech (Thermal Sciences) Project Evaluation Committee member
Dr. P.K. Rajendrakumar	<ul style="list-style-type: none"> Chairman, PG admissions
Mr. M. Srinivas	<ul style="list-style-type: none"> Lab in charge Solar energy center, MED Faculty Advisor, 2012 batch Member Anti ragging Squad, NIT Calicut

Dr. R. Vijaya kumar	<ul style="list-style-type: none"> • Dean, Faculty Welfare
Dr. M.L. Joy	<ul style="list-style-type: none"> • Students guidance cell • Class committee Chairman • Faculty advisor
Dr. A. Shaija	<ul style="list-style-type: none"> • Faculty Advisor, S3 Mechanical • Class Committee Chairman, S3 PM • Institute Anti-ragging Committee- member • Main Warden, Ladies hostel (old) & Mega hostel • Wardens Core Committee - member • Lab Incharge - PG Thermal Science Lab • Project Evaluation Committee - M.Tech in Energy management since 2009
Dr. TJS Jothi	<ul style="list-style-type: none"> • Faculty Advisor • Warden – C hostel
Dr. S. Jayaraj	<ul style="list-style-type: none"> • Chief-warden
Dr. Jose Mathew	<ul style="list-style-type: none"> • Dean, Research and Consultancy • Chairman, TBI • Chairman, S7 Class Committee • Institute Coordinator- NBA Accreditation • Professor in Charge of CAD/CAM Centre, Advanced Manufacturing Centre, • Sophisticated Instruments Centre • Professor in Charge of Sophisticated Instruments Centre • Reviewer of International journals and conferences
Dr. R. Sridharan	<ul style="list-style-type: none"> • HOD- Mechanical Engineering Department
Dr. V. Madhusudanan Pillai	<ul style="list-style-type: none"> • Programme Coordinator for M. Tech. (Industrial Engineering and Management) • Faculty-in-charge, Industrial Engineering Lab • Convener, On-campus registration, 8th Convocation • Reviewer of <ol style="list-style-type: none"> 1. International Journal of Production Research, Official Journal of the International Foundation for Production Research (IFPR), Publisher: Taylor and Francis, London 2. Computers and Industrial Engineering, Publisher: Elsevier, Amsterdam, Available online through ScienceDirect.com 3. International Conference on Green Technologies- ICGT12, December 18 – 20, 2012 Organised by Mar Baselios College of Engineering and Technology, Thiruvananthapuram, and University of Dayton, USA, at Thiruvananthapuram, Kerala. 4. Editorial Board member of the Journal of "Trends in Mechanical Engineering and Technology" of the STM Journals. STM journals is an ambitious initiative of the Consortium e-learning Network Privates., (CELNET), New Delhi. • Developed a supply chain role play game <ol style="list-style-type: none"> 1. Version four is developed in 2012-13. This game is similar to the 'Beer Distribution Game' of MIT, USA. The previous versions are very widely used for research and as a lab experiment/exercise for UG (Production

	<p>Engineering) and PG (Industrial Engineering and Management) programmes. A workshop was also organised based on this game software package. This Game is probably the first of its kind in India.</p> <p>2. Developed a 'Vendor Managed Inventory Based Supply Chain Role Play Game' in 2012-13. This is a suitable package for understanding vendor managed inventory concept and it is useful as a teaching and learning tool for vendor managed inventory and supply chain management. This package is probably the first of its kind in India.</p>
Dr. V. Madhusudanan Pillai	<p>WEB PUBLISHING</p> <ul style="list-style-type: none"> ▪ Course notes for the following subject are published in my link available in the institute website. ▪ Production Planning and Control. ▪ Inventory and Supply Chain Management. • Lab exercises developed are published in my link available in the institute website and revisions are updated yearly in the website.
Mr. Gangadhara Kiran Kumar	<ul style="list-style-type: none"> • Lab Incharge, Fluid Mechanics and Fluid Machinery Lab • M.Tech Material Science Project Evaluation Committee Member • B.Tech Material Science Project Evaluation Committee Member • Faculty Advisor

d. Conferences/Summer/Winter School/Short term Courses/ Workshops conducted

Sl. No	Title	Coordinators	Duration & Period
1	One day workshop on Statistical Analysis for Research	Vinay V Panicker and R. Sridharan	06 October, 2012, NIT Calicut
2	Advances in Manufacturing Engineering	Dhanish P B and R. Manu	21-25 May 2012, NIT Calicut
3	Two-day workshop on Supply Chain Role Play Game (SCRPG). This workshop was based on the package developed in NITC for the participants from Academic institutions and Industry	V. Madhusudanan Pillai	21-22 December 2012, NIT Calicut.
4	Workshop on Strategies to attain Excellence in Impact making Research and Development (SAEIMRD)	Jose Mathew (NITC) and K. Prasad (NITK)	NIT Surathakal 3-4, February, 2012, NIT Calicut

e. Expert lecturers delivered in Conferences/Seminar/workshops

Sl. No.	Name of Staff	Title of the Programme	Duration and Period	Organization
1	Vinay V Panicker	Introduction to Supply Chain Management	21 December 2012	Department of Mechanical Engineering, NIT Calicut
2	Arun P	Design of Hybrid Energy Systems , Recent Advances in Alternative Energy Technologies, 5 th November – 10 th November, 2012	8/11/2012	Rajiv Gandhi Institute of Technology Kottayam
3	C. Muraleedharan	Design of Heat Pipes: International Workshop on Heat Pipes	June 2012	GEC Kannur

4	Dhanish P B	FDP	19-06-2012	NIT Calicut
5	K. Prabhakaran Nair	Advances in design optimization	18-03-2013	Govt. Engineering College Kozhikode
6	V. Madhusudanan Pillai	Non-Traditional Modelling Techniques – Optimization Algorithms FDP	June 2012	NIT Calicut
7	TJS Jothi	Airfoil theory	01-03-2013	Sardar Raja College of Engineering Tamilnadu

f. Details of Faculty, who acquired Higher Qualification: NIL

g. Consultancy and testing:

Sl. No	Nature of Service	Organization	Revenue earned	Status
1	Short term course in Metrology and Computer Aided Inspection. By Dr. Dhanish P B	M/s NTTF Tellicherry Revenue:	Rs. 68,900/-	completed

h. Patents acquired and filed: NIL

i. Student achievements

j. Books published:

1	Book Chapter- Education for Human Resource Development-2012; Atlanta Publishers- NewDelhi	A Solution for 21st century Higher education.-Reengineering?	Sudheer,A.P & Varapasad. G	Book Chapter-3 (National)2012
2	Fluid Power Control	John-Wiley Sons, 2013	Jagadeesha T and Thammaiah Gowda.	ISBN978-812653954-3
3	Mechanical Vibration	McGrawHill, 2012	Thammaiah Gowda, D. V. Girish Jagadeesha T	ISBN 978-1-25-900617-3

DEPARTMENT OF MATHEMATICS

a. Publications

i. Journal

SI No.	Name of the Author	Title of Paper	Name of Journal	National/ International
1	A.Nayak,S. Panda and G. C. Dash	Unsteady MHD flow of a visco-elastic fluid along vertical porous surface with chemical reaction	Proceedings of the National Academy of Sciences, India Section A: Physical Sciences(Springer), 83(2):153-161, 2013	National
2	B.Rout,S.Parida and S. Panda	MHD heat and mass transfer of chemical reaction fluid flow over a moving vertical plate in presence of heat source with convective surface boundary condition	International Jr. of Chemical Engineering, doi:10.1155/2013	International
3	A.Nayak and S. Panda	Mixed convective MHD flow of second grade fluid with viscous dissipation and Joule heating past a vertical infinite plate with mass transfer	Mathematical Theory and Modelling, 3(2):38-46, 2013	International
4	M. Sellier and S. Panda	Inverse Temperature Reconstruction in Thermocapillary-Driven Thin Liquid Films	Int. Jr. of Numerical Analysis and Modelling Series B, 3(3):285-296, 2012	International

5	Girish K P, Sunil Jacob John	Multiset Topologies Induced by Multiset Relations	Information Sciences,188(2012) 298-313	International
6	Jyothis Thomas, Sunil Jacob John	μ -Compactness in Generalized topological spaces	Journal of Advanced Studies in Topology, Vol. 3, No. 3, 2012, 18 -22.	International
7	Shinoj T K, Sunil Jacob John	Intuitionistic Fuzzy Multisets And Its Application in Medical Diagnosis	International Journal of Mathematical and Computational Sciences 6 (2012) 1-4	International
8	Babitha KV, Sunil Jacob John	On soft Multisets	Annals of Fuzzy Mathematics and Informatics,Volume 5, No. 1, (2013) 35-4.	International
9	Baiju T , Sunil Jacob john	Covering Dimension and Normality in L-topological Spaces	Springer Mathematical Sciences, 2012, 6:35.	International
10	Jobish VD , Babitha KV and Sunil Jacob John	On Operations of Soft Lattices	Journal of Advanced Research in Pure Mathematics, Vol. 5, Issue. 2 (2013) 71-86	International
11	Boby P Mathew, Sunil Jacob John	On Rough Topological Spaces	International Journal of Mathematical archive 3(9), 2012, 3413-3421.	International
12	Girish KP, Sunil Jacob John	On Multiset Topologies	Theory and Applications of Mathematics & Computer Science, 2 (1) (2012) 37–5.	International
13	BajuT and Sunil Jacob John	Topics in Fuzzy Topology: Non compact Covering Properties	LAP LAMBERT Academic Publishing (2012), ISBN-978-3659262067.	International
14	Girish KP, Sunil Jacob John	Multiset Relations and Topology	LAP LAMBERT Academic Publishing (2012), ISBN- 978-3844313505.	International
15	Sunil Jacob John, Baiju T, Lineesh MC (Editors)	Proceedings of National Conference on Mathematics of Soft Computing,	Mudranik Tech. Pub.2012. ISBN- 978-9382359715	International
16	Sunil Mathew, M.S.Sunitha	A characterization of partial blocks in weighted graphs	Information Processing Letters 112 (2012) 706–710	International
17	Sunil Mathew	On cycle connectivity of graphs	Journal of Interconnection Networks, 13(2) (2012), pp.1-12	International
18	Minirani.S, Sunil Mathew	On the IFS generating super self similar sets	Mathematical Sciences International Research Journal, vol.1, No.3, pp.957-963, 2012.	International
19	Sunil Mathew,M.S Sunitha	Menger's theorem for fuzzy graphs	Information Sciences, 222 (2013) 717–726.	International
20	Sunil Mathew, M.S.Sunitha	Cycle connectivity of a fuzzy graph	Journal of Intelligent & Fuzzy Systems 24 (2013) 549–554.	International
21	Sunil Mathew, M.S.Sunitha	A generalization of classical connectivity parameters for graphs	ISRN Combinatorics, World Applied Sciences Journal 22 (Special Issue of Applied Math): 18-22, 2013.	International
22	Sunil Mathew	Arc analysis algorithm (AAA) for arc weighted graphs	Discrete Mathematics, Algorithms and applications Vol. 5, No. 4, (2013) 1350026 (9 pages).	International
23	Sunil Mathew, M.S.Sunitha	On totally weighted interconnection networks	Journal of interconnection networks, Vol. 14, No. 1 (2013) 1350004 (16 pages).	International
24	Minirani S, Sunil Mathew	Bounds for the dimension of the attractor of a scaled IFS	Asian-European Journal of Mathematics, Vol. 6, No. 2 (2013) 1350028 (10 pages).	International
25	Sunil Mathew, M.S.Sunitha	Strongest Strong Cycles and theta fuzzy graphs	IEEE transactions on Fuzzy Systems (accepted)	International

26	Anjali, N, Sunil Mathew	Energy of a fuzzy graph	Annals of fuzzy Mathematics and Informatics, (Accepted)	International
27	Sunil Mathew	Partial trees in weighted graphs-II	European Journal of applied Sciences (Accepted)	International
28	Rinju Balu S, Sunil Mathew	On n-m iterated function systems	Asian-European Journal of Mathematics (Accepted)	International
29	Anoop N Nair, M J Jacob, A Krishnamoorthy	The multi-server M/M/(s,S) queueing inventory system	Annals of Operations Research (only online appeared, print not appeared)	International
30	P.Shanas Babu, A.V.Chithra	Acyclic coloring of some operations on certain graphs	Mathematical sciences International Research Journal, vol1 No.3,951-956, (2012),.	International
31	P.Shanas Babu, A.V.Chithra	Further results on acyclic chromatic number	Open Journal of Discrete Mathematics,(Accepted)	International
32	P. K Sanjay and S. Thangavelu	Dimension free boundedness of Riesz transforms for the Grushin operator	Proceedings of the American Mathematical Society (accepted; to appear)	International

ii. International Conference

Sl.No.	Name of the Author	Title of Paper	Name of International conference	Vol, Year, p.p.
1	K. P. Somashekhar, S. Panda, Jose Mathew and N. Ramachandran	Numerical Simulation of micro-EDM model with multi-spark	4th Int. and All India Technology Design and Research (AIMTDR-2012), Calcutta	International
2	S.Panda, M. Acharya and A. Nayak	Non-Darcian effects on the flow of viscous fluid in partly porous configurations and bounded by heated oscillating plates	Springer Proceedings in Mathematics and Statistics, 28, 2012	International
3	Reshma A.P, DhanyaMukundan, S. Panda	A Meshfree approach to solve fiber equations	Int. Conference on Mathematical Modeling and Applied Computing, CIT, Coimbatore, 2:124-231, 2012	International
4	K. P. Somashekhar, S. Panda, Jose Mathew and N. Ramachandran	Numerical Simulation of micro-EDM model with multi-spark	4th Int. and All India Technology Design and Research (AIMTDR-2012), Calcutta	International
5	Mini Rani S, Sunil Mathew	Some Constructions of Super Self Similar Sets	Proc. of the International Conference on MMASC 2012 Vol. II, pp. 3-7.	International

iii. National Conference

Sl.No	Name of the Author	Title of Paper	Name of National conference	Vol, Year, p.p.
1	Mahesh Kumar and Aby Subhash	Zero failure bayesian reliability for safety critical systems"	International Conference on Mathematical Sciences, Dec 28-31, 2012, at Nagpur, Maharashtra State, India.	National
2	Babitha K V and Sunil Jacob John	Soft Topologies Generated Using Soft Set Relations	Proceedings of National Conference on Mathematics of Soft Computing, NIT Calicut July 5-7, pp.49-51, 2012.	National
3	Jobish VD and Sunil Jacob John	Soft Lattice Topology	Proceedings of National Conference on Mathematics of Soft Computing, NIT Calicut July 5-7, pp. 70-74, 2012.	National
4	Deepak D and Sunil Jacob John	Hesitant Fuzzy Relations	Proceedings of National Conference on Mathematics of Soft Computing, NIT Calicut July 5-7, pp. 52-58, 2012.	National

5	Jyothis Thomas, Sunil Jacob John	Compactness in Generalized topological spaces using D_{μ} -Srets	Proceedings of National Conference on Mathematics of Soft Computing, NIT Calicut July 5-7, pp. 110-112, 2012.	National
6	Minirani S, Sunil Mathew	Dimension of the invariant set of a scaled IFS	Proceedings of the National Conference of Soft Computing, NIT Calicut, July 5-7,2012.	National
7	Jill K Mathew, Sunil Mathew	Weighted distance in graphs	Proceedings of the National Conference of Soft Computing, NIT Calicut, July 5-7,2012.	National
8	Dr.Ashish Awasthi,Deepa.j.S	An unconditionally stable numerical method for Banger's equation.	Proceedings of the National Conference of Soft Computing, NIT Calicut, July 5-7,2012.	
9	P.Shanas Babu, A.V.Chithra	Acyclic colouring of line graph of some families	Proceedings of National conference on Mathematics of soft computing, NIT Calicut,144-147,July 5-7, 2012	National
10	Dr.Sushama.C.M Manjusha.A.P	Fuzzy DEA Models.	Proceedings of the National Conference of Soft Computing, NIT Calicut, July 5-7,2012.	

b. Community Services

Name of Staff	Academic and administrative Services
Dr. M. J. Jacob	Member of doctoral committees of various departments
Dr. Jessy John C	Member of doctoral committees of various departments
Dr. V. Narayanan	HOD, MAT from 01.01.2013 till date Member of doctoral committees of various departments.
Dr. Chithra A.V.	Member of doctoral committees of various departments Warden – Ladies Hostel
Dr. Sunil Jacob John	Member of doctoral committees of various departments Coordinator -Thathva.2012
Dr. M S Sunitha	Member of doctoral committees of various departments
Dr. C M Sushama	Member of doctoral committees of various departments
Dr. Satyananda Panda	Member of doctoral committees of various departments. In charhe of Students guidance cell.
Dr. Sunil Mathew	Deputy Chairperson – PG Admissions Member of doctoral committees of various departments Warden- Apartments
Dr. Mahesh Kumar	Member of doctoral committees of various departments Warden – C Hostel
Dr. Ashsish Awasthi	Member of doctoral committees of various departments Warden – PG 1 Hostel Officer in charge - Official Language Unit

c. Other Academic and Administrative Services

d. Conferences/Summer/Winter School/Short term Courses/ Workshops conducted.

Sl.No	Title	Coordinators	Duration & Period
1	Organized invited lecture series on “PDE and Scientific Computing” by Dr. A. Grm, Slovenia	Dr. S. Panda	May 5-18, 2012
2	Organized Lecture Series on “Wavelets and multi resolution analysis” by Prof. P. C. Das, IIT Kanpur	Dr. S. Panda	Feb. 18-21, 2013
3	NITC Technical Festival Tathva-2012	Sunil Jacob John (Convener)	Oct. 17-21, 2012
4	National Conference on Mathematics of Soft Computing	Sunil Jacob John, (Organizing Secretary)	July 5-7, 2012
5	AICTE-MHRD Faculty Development Programme on "Soft Computing Theory and Techniques	Sunil Jacob John, CM Sushama	May 21-25, 2012

e. Expert lecturers delivered in Conferences/Seminar/workshops

Sl. No.	Name of Staff	Title of the Programme	Duration and Period	Organization
1	Dr. S. Panda	Modeling week and study group meetings on Industrial	Dec. 3-8, 2012	M.S University Boroda, Gujrat
2	Dr. S. Panda	conference of Orissa Mathematical Society and National Conference on Fourier analysis and Differential Equations	Dec. 29-30, 2012	Sambalpur University, Burla, Odisha
3	Dr. MAHESH KUMAR	Training Programme for Arbitron Technology Services Kochi, India.	Jan 7-8, 2012	NITC
4	Dr. Krishnan Paramasivam	Two Days National level Seminar on Recent Trends in Distance in Graphs	March 12-13, 2012	Ayya Nadar Janaki Ammal College, Tamil Nadu (sponsored by UGC)
5	Sunil Jacob John	UGC sponsored refresher course at Academic staff college, University of Calicut.	18-7-2012	University of Calicut.
6	Sunil Jacob John	AICTE-DRDO sponsored Faculty Development Programme	7-12-12	Rajagiri School of Engg. And Technology, Kochi-39.
7	Sunil Jacob John	National Conference on Discrete Mathematics and Applications.	14-12-12	St. Xaviers college, Palayamkottai, Tirunelveli
8	Sunil Jacob John	MATHS FEST programme organized in association with National Mathematical Year	17-12-2012.	Assumption college Changanassery
9	Sunil Jacob John	DST-DRDO-CSIR sponsored National Workshop	4-1-13	Manipal University, Karnataka
10	Sunil Jacob John	Two day National Seminar on Mathematics & Theoretical Computer Science.	21-1-13	Govt. Victoria College, Palakkad
11	Sunil Jacob John	Lecture on Number theory for Cryptography	15-3-13	Govt. Engg. College, Mananthavady
12	Sunil Jacob John	National Conference on Fuzzy Mathematics	22-12-12	PSG Coimbatore
13	Sunil Mathew	The Key to the universe	Jan.9-13,2012.	Inspire Intenship camp sponsored by DST, S.H.College Thevara, Cochin.
14	Sunil Mathew	Fuzzy logic and its applications,	7-8, Feb.2012.	Jyothi Engg. College, Cheruthuruthy, Trissur, National Conference on 'Emerging trends in Science and Curent affairs'
15	Sunil Mathew	Introduction to Fractal geometry	9-10. Feb.2012.	Govt. College Kottayam National seminar on Recent Trends in Mathematics: Topology and its applications,
16	Sunil Mathew	Introduction to Fuzzy Graphs	Feb.23-24,2012.	PTM Govt.College Perinthalmanna, National conference on "Recent trends in graph theory
17	Sunil Mathew	Science in Nature	2-3 March.2012.	St.Mary's College Trissur, National Seminar on Quality enhancement in Higher education through student support and progression

18	Sunil Mathew	Introduction to Fractal geometry	March 7,2012	WMO Arts and Science College Muttill, Regional Seminar on "Developments in Geometry"
19	Sunil Mathew	The Key to the Universe,	Sept. 10-14, 2012	Sacred heart College Thevara, INSPIRE 2012
20	Sunil Mathew	Introduction to Fuzzy Graph Theory	Dec.5-15,2012.	RSET Cochin, FDP on Applications of Mathematics
21	Sunil Mathew	Quiz master	17-19 Dec.2012.	All Kerala Intercollegiate quiz competition, Assumption College Changanachery,
22	Dr.Chithra.A.V	FDP ON APPLICATIONS OF MATHEMATICS	DEC 03-15,2012	Rajagiri School of Engineering and Technology
23	Dr.Chithra.A.V	Work shop on Spectral Analysis and Applications	FEB14-16,2013	NITK SURATHKAL

f. Details of Faculty, who acquired Higher Qualification:

Dr. Sanjay.P.K : : **Ph. D. IISc, Bangalore**

g. Consultancy and testing: NIL

h. Patents acquired and filed: NIL

i. Student achievements: NIL

DEPARTMENT OF CHEMISTRY

a. Publications

i. Journal

Name of the Author	Title of the paper	Name of Journal	Vol,Year.PP
Silviya E. K., Unnikrishnan G., S. Varghese and Guthrie J. T.	Thermal and Mechanical Characterization of EVA/Banana Fibre-Derived Cellulose Composites	J. App. Polym. Sci	125(1),2012, 786- 792
Sreekumar P. A., Jean marc Saiter, Kuruvilla Joseph, Unnikrishnan G. and Sabu Thomas	Electrical Properties of Sisal Fibre Reinforced Polyester Composites Fabricated by Resin Transfer Moulding”,	Composite Part A: Applied Science and Manufacturing,	43(3), 2012, pp.507-511
Silviya E. K., Unnikrishnan G., S. Varghese and Guthrie J. T	Barrier Properties of EVA/Banana Fibre-Derived Cellulose Composites	Polymer Engineering Science	<u>Volume 52, Issue 10,</u> pages 2140–2146, October 2012
PA Sreekumar, B Agoudjil, A Boudenne, G Unnikrishnan, L Ibos, M Fois, S Thomas	Transport properties of polyester composite reinforced with treated sisal fibers	Journal of Reinforced Plastics and Composites	31 (2) (2012) 117

Sangeetha Chenampulli, G. Unnikrishnan, Sabu Thomas	Cellulose Nano-particles from Pandanus: Viscometric and. Crystallographic Studies	Cellulose	20(1):429-438
C.P Mohamed Kutty, M.Sunil kumar, A. Sujith, G. Unnikrishnan, M.Jahfar,, , Published online before print January 12, 2012,	Organic Vapour Permeation through membranes based on EPDM/PVC composite	Journal of Elastomers and Plastics	Print- Volume 44 Issue 5 September 2012.405-418
C.P. Mohamed Kutty, M.Sunil kumar, A.Sujith , G.Unnikrishnan, M.Jahfar, ,	Interactions of some liquid fuels with EPDM/PVC composites	Journal of Applied Chemistry	(2012) , 1, 23-27
C.P. Mohamed Kutty, M.Sunil kumar, A.Sujith , G.Unnikrishnan, M.Jahfar,	Molecular Transport of Chloromethanes through EPDM/PVC systems	Acta Chimica & Pharmaceutica Indica	3(1), 2013, 10-16
Rafeeqe P, Unnikrishnan G., S. Varghese and Guthrie J. T	Optical properties of complex doped PMMA	Polymer Engineering & Science	<u>Volume 53, Issue 1, pages 119–124, January 2013</u>
Souda P. and Lisa Sreejith	<i>Poly (Acrylate-acrylic acid-co-maleic acid) Hydrogel- A cost effective and efficient method for removal of metal ions from water,</i>	J. separation Science	DOI: 10.1080/01496395.2013.809106. April 2012. (Accepted)
M. Sunil Kumar, Tania Fransis, Eby Thomas Thachil, A. Sujith	Low density polyethylene-chitosan composites: a study based on biodegradation	Chemical Engineering Journal	204, 2012, 114-124
N. Riyasudheen, A. Sujith	Formation behavior and performance studies of poly(ethylene-co-vinyl alcohol)/poly(vinyl pyrrolidone) blend membranes prepared by non-solvent induced phase inversion method	Desalination	249, 2012, 17-24
N. Riyasudheen, P. Binsy, K.K. Aswini, Janisha, A. Sujith	Bivine serum albumin immobilized-polyvinyl alcohol membranes: a study based on sorption, dye release and protein adsorption	Polymer-Plastics Technology and Engineering	51, 2012, 1351-1354
Rojisha, V. C., De, S.,; Parameswaran, P.	Electronic structure of six-membered N-heterocyclic carbenes and its heavier analogues: reactivity of the lone pair versus the exocyclic double bond	Inorganic Chemistry	51,2012, 8265-8274.
De, S.; Parameswaran, P. P.	Neutral tricoordinated beryllium(0) compounds— isostructural to BH ₃ but isoelectronic to NH ₃	Dalton Transactions	42, 2013,4650-4656
Anusha, C.; De, S.; Parameswaran, P.	Ring Contraction of Six-membered Metallabenzynes to Five-membered Metal-carbene Complexes: A Comparison with Organic Analogues	Dalton Transactions	2013, DOI:10.1039/C3DT51428E

ii. International Conference

Name of the Author	Title of Paper	Name of International conference	Vol, Year, p.p.
N. K. Siji Narendran, C. Ajina, Rahul Soman, Chellaiah Arunkumar and K. Chandrasekharan	DFWM Measurements on Mn-(meso-tetrakis (2,3,5,6-tetrafluoro-N,N,N-trimethyl-4-aniliniumyl))porphyrin complex	International Conference on Fiber Optics and Photonics (Photonics 2012) at IIT Madras, December 9-12, 2012	WPO.7
N. K. Siji Narendran, M Midhun, Rahul Soman, Chellaiah Arunkumar and K Chandrasekharan	Synthesis and Third Order Optical Investigations of Nitrophenyl Porphyrins	International conference on Recent Trends in Applied Physics and Material science RAM 2013 at Govt. college of Engineering and Technology Bikaner, Rajasthan, Feb 1-2, 2013	G-1540, p. 255

iii. National Conference

Name of the Author	Title of Paper	Name of National conference	Vol, Year, p.p.
Rahul Soman, Siji Narendran N. K, Midhun, M, K. Chandrasekharan and C. Arunkumar	Syntheses, Characterization, Nonlinear Absorption and Optical Limiting Studies of Axial Ligand Modified High Valent Tin(IV) Porphyrins, Chennai Chemistry Conference-2013, CLRI, Chennai, February 8-10, 2013	Chennai Chemistry Conference-2013, CLRI, Chennai, February 8-10, 2013	NA

b. Community Services

Name of Staff	Details
G. Unnikrishnan	co-ordinator of Aavishkar 2012, co-ordinator of Aavishkar 2013
Dr. Lisa Sreejith	Developed an ecofriendly solution for plastic waste management
Dr. A. Sujith	Programme Coordinator, National Service Scheme, NIT Calicut
Mr. Prakash Peter	Member of the integrated socio economic survey of Chathamangalam Grama panchayath conducted by NSS unit of NITC Volunteer, pain and Paliative Care Society, Medical College, Calicut

c. Other Academic and Administrative Services

Name of Staff	Academic and Administrative Services
Dr. G. Unnikrishnan	1. Professor-in charge PG Academics (2012-2013) 2. Co-ordinator, NIT Sikkim, Examination in charge- Chemistry
Dr. Lakshmi C.	HOD Chemistry Ph.D Coordinator Stores & Purchase in charge, Dept. of Chemistry
Dr. Lisa Sreejith	First Year B.Tech Coordinator (2010- 2013 May)
Dr. A. Sujith	Programme coordinator, National Service Scheme, Faculty –in – charge- Instrumentation

Dr. Suni Vasudevan	First year B.Tech Theory Course coordinator
Dr. C. Arunkumar	Time table in charge
Dr. Parameswaran P	Stores & Purchase in charge, Dept. of Chemistry First year B.Tech Lab Course coordinator, Faculty-in-charge Library.

d. Conferences/Summer/Winter School/Short term Courses/ Workshops conducted

Sl.No	Title	Coordinators	Duration & Period
1	Novel strategies in organic chemistry	Dr. G. Unnikrishnan, Dr. Lakshmi C.	3-7 th Dec 2012
2	Chem Ex-2013, Chemistry exhibition for students	Dr. A. Sujith, Dr. P. Parameswaran	4 th Jan. 2013

- e. Expert lecturers delivered in Conferences/Seminar/workshops : NIL
 f. Details of Faculty, who acquired Higher Qualification: NIL
 g. Consultancy and testing: NIL
 h. Patents acquired and filed: NIL
 i. Student achievements: NIL

DEPARTMENT OF PHYSICS

- a. Publications
 i. Journal

Name of the Author	Title of Paper	Name of Journal	Vol, Year, p.p
P.Predeep, Najidha.S, and Neena.P	Toward "Rubbery" Nanoparticles	Journal of Applied Polymer Science	(2013) DOI: 10.1002/app.39172
P. Predeep, D. Devasia, J. Aneesh and N.M. Faseena	Organic bistable memory device from natural rubber (cis 1,4 polyisoprene)/ fullerene nanocomposite thin films	Microelectronic Engineering	107,54, 2013.
K. Sreelatha, and P. Predeep	Electrically conducting plastic films from polyethylene Terephthalate for optoelectronic applicatio	POLYMER, Series A	2013, Volume 55, No. 7, p. 1-7
A.M.Mathew and P.Predeep	Plasma polymerized elastomer / conducting polymer composite: structural and optical characterization	Polymer Composites	2013
T.Kannan, and P.Predeep	Importance of avrami index in the processing of bismuth based high temperature superconductors	Journal of Alloys and Compounds	DOI:10.1016/j.jallcom.2013.05.042 (2013)
T.Kannan, and P.Predeep	Effect of Sintering Temperature on the Glassy Precursor Synthesis of Superconducting Bi _{1.6} Pb _{0.4} Sr ₂ Cu ₄ Ca ₃ O ₁₂	Journal of Superconductivity and Novel Magnetism	26,1, 53 (2013)
T.Kannan, and P.Predeep	Investigation into the superconducting threshold of Bi _{1.6} Pb _{0.4} Sr ₂ Can ₂₁ CunO ₂ n+4+d, n 5 2, 2.5, 4 perovskites synthesized by glassy precursor route with Thermal and Ramanspectroscopic techniques	J Therm Anal Calorim	(2013), DOI 10.1007/s10973-012-2845-x
K.Sreelatha, and P.Predeep	Iodine doped, semi-conducting nylon 6 polymers	Journal of Plastic Film and Sheeting	DOI:10.1177/8756087912464036 (2013)
N.M. Faseena, G. Santhamma, Anisha Mary Mathew, and PPredeep	Styrene butadiene copolymer-based transparent conducting thin films: Effect of dopants	Journal of Elastomers & Plastics	(2013), DOI: 10.1177/0095244312468441
J. Aneesh and P. Predeep	Organic memory devices with natural rubber / fullerene composites	Rubber chemistry and technology	(in press)

T.A. Shahul Hameed, J. Aneesh, M.R. Baiju, J.A. Jaleel and P. Predeep	Modeling, Simulation and Characterization of Organic Light Emitting Diodes	International Journal of Applied Engineering Research	8, 89, 2013.
A. Iqbal, T.A. Shahul Hameed, J. Aneesh, J.A. Jaleel and P. Predeep	Design and Simulation of Organic Solar Cells Based on P3HT: PCBM	Journal of Applied Engineering Research	8, 15, 2013.
J. Aneesh, T.A. Hameed shahul, N.M. Faseena, G.D. Sharma and P. Predeep	Organic bistable memory device based on a novel pyrrolo-pyrrole derivative, PpbAN	Optoelectronics and advanced materials-rapid communications	6, 1104 (2012).
T.A Hameed Shahul, M.R. Biju, J. Aneesh and P. Predeep	Impedance spectroscopic studies of organic light emitting diodes with dimethyl sulphoxide doped hole injecting and lithium fluoride electron injecting layers	Optoelectronics and advanced materials - rapid communications,	6, 91, 2012
Anisha Mary Mathew, P. Predeep	Styrene butadiene co-polymer based conducting polymer composite as an effective corrosion protective coating	Progress in Organic Coatings,	74 (2012) 14
T. A. Hameed Shahul, M. R. Baiju, J. Aneesh, P. Predeep	.Impedance spectroscopic studies of Organic Light Emitting Diodes with dimethyl sulphoxide doped hole injecting and lithium fluoride electron injecting layers	Optoelectronics and Advanced materials - Rapid communications	6 (1,2) 2012, 91
J. C. Berne`de, S. Houari, D. Nguyen, P. Y. Jouan3, A. Khelil, A. Mokrani, L. Cattin, and P. Predeep	XPS study of the band alignment at ITO/oxide (n-type MoO3 or p-type NiO) interface	Phys. Status Solidi A,	1-7 (2012)
Koya PK, Chougaonkar MP, Predeep P, Jojo PJ, Cheriyan VD, Mayya YS, Seshadri M	Effect of Low and Chronic Radiation Exposure: A Case-Control Study of Mental Retardation and Cleft Lip/Palate in the Monazite-Bearing Coastal Areas of Southern Kerala	Radiation research	177(1), 109 (2012)
T.K.Jaysree and P.Predeep	Non-isothermal crystallization behavior of styrene butadiene rubber/ high density polyethylene binary blends	J. Thermal Analysis. and Calorimetry	(2012), 108, 3, 1151
P. Sudheesh, Chandrasekharan .K	$\chi^{(3)}$ measurements in Schiff's base derivatives, Effect of metal nanoparticles	Solid State Communication	152 (2012) 268-272
S. Vijauakumar, M. Babu, Balakrishna Kalluraya, Chandrasekharan .K	Third- order nonlinear optical repose to newly synthesized acceptor/donor substituted propylidene aryloxy acet hydrazide	Optik	123 (2012) 21-25
Jeeju, Pullarkat P, Jaualekshmi s, Chandrasekharan K, P. Sudheesh	Size dependent nonlinear optical properties of spin coated zinc oxide-polystyrene nanocomposite films	Optics communications	285 (2012) 5433-5439
Jeeju, Pullarkat P, Jaualekshmi s, Chandrasekharan K, P. Sudheesh	Enhanced linear and nonlinear optical properties of thermally stable ZnO/poly(styrene)-poly (mthyl methacrylate) nanocomposite films	Thin Solid Films	531 (2013) 378-384
T. Antojohny , Viswanathankumar a, P Sudheesh, K Chandrasekharan	Nonlinear optical characteristics in lithium subntituted ZnO thin films”	Optics Communications	309 (2013) 279 281

D M Rao, K N Sharafudeen, K Chandrasekharan, Soney Varghese	Third order nonlinear optical properties of azomethine derivatives	Optics communications	287 (2013) 224-227
Varma R. M., S. M. Ball, T. Brauers, H.P. Dorn, U. Heitmann, R. L. Jones, U. Platt, D. Pöhler, A. A. Ruth, A. J. L. Shillings, J. Thieser, A. Wahner, and D. S. Venables	Light extinction by Secondary Organic Aerosol: an intercomparison of three broadband cavity spectrometers	Atmos. Meas. Tech	6, 6685–6727 (2013)
Du. K., Shi. P., Rood. M. J., Wang. K., Wang. Y., and Varma R. M	Digital Optical Method to quantify the visual opacity of fugitive plumes	Atmospheric Environment	77, 983 – 989
Dorn, H.-P. R. L. Apodaca, M. K. Ravi Varma, et.al	Intercomparison of NO ₃ radical detection instruments in the atmosphere simulation chamber SAPHIR	Atmos. Meas. Tech.	6, 1111–1140
M.Yoosuf Ameen, T. Abhijith, Susmita De, S. K Ray and V.S Reddy	Linearly polarized emission from PTCDO-C8 one-dimensional microstructures.	Organic Electronics	Vol. 14, No. 2, pp. 554-559
P. K. Madhavan Unni	Methyl ethyl ketone+water+secondary butyl alcohol: a potential system for the exploration of a quadruple critical point		The Journal of Chemical Physics, 124, 124510 (2006)
P. K. Madhavan Unni	Critical behaviour of the Aqueous electrolytic system 3-methylpyridine + D ₂ O + NaBr		The Journal of Chemical Physics, 124, 054505 (2006)
P. K. Madhavan Unni, M. K. Gunasekaran and A. Kumar	±30μK temperature controller from 25 to 103 °C: Study And analysis		Review of Scientific Instruments, 74, 231 (2003)

(ii). International Conference

Name of the Author	Title of Paper	Name of International Conference	Vol, Year, p.p
K. M. Anoop, Renu Jose, K. Shiju, Jayan Manuvel, and P. Predeep	Insitu polymerised polyaniline-polyisoprene composite for microelectronic application	Proceeding of International Conference on Recent Trends in Applied Physics and Material Science	AIP Conf. Proc. 1536, 1141-1142 (2013); doi: 10.1063/1.4810640 © 2013 AIP Publishing LLC 978-0-7354-1160-9/\$30.00 1141.
K.Shiju, T.Praveen,P.Preedep.	Characterisation of Elastomeric Thin Film Organic Field Effect Transistor	International conference on thin films and applications (ICTFA2013)	
V.P.Liyana, N. Aminakutty, K. Shijuand P.Predeep	Organic Field Effect Transistor with Silica Nanoparticles on Gate Dielectric	International conference on thin films and applications (ICTFA2013)	
T. Praveen, K. Shiju and P. Predeep	Organic Thin Film Diode from Natural Rubber	International conference on thin films and applications (ICTFA2013)	

Yoosuf Ameen M, Saipriya K P and V S Reddy	Growth and Characterization of Cobalt Phthalocyanine Nanostructures for Chemical Sensors.	International Conference on Thin Films and Applications (ICTFA), SASTRA University, Thanjavur	p. 117 (2013)
Abhijith. T, Yoosuf Ameen M and V S Reddy	Synthesis of PTCDI-C8 One dimensional Nanostructures for Photovoltaic Applications.	International Conference on Material Science and Technology (ICMST), St. Thomas College Pala, India.	p.184 (2012)

(iii). National Conference

Name of the Author	Title of Paper	Name of National Conference	Vol, Year, p.p
Eswaran J, Shiju K, Sandhya K and P Predeep	Organic schottky diodes from cis 1, 4 poly isoprene [natural rubber]	"National Conference on Advanced Materials and Applications NCAMA 2013 "	2013
Shiju. K and P. Predeep	Organic field effect transistor (OFET) with metallic electrodes and doped biopolymer channel	"National Conference on Advanced Materials and Applications NCAMA 2013 "	2013
Anoop K M and P. Predeep	Schottky barrier diodes from natural rubber polyaniline nano composites	"National Conference on Advanced Materials and Applications NCAMA 2013 "	2013
T.Praveen, , K.Shiju, K.Sandhya and P.Predeep	Schottky diode from natural rubber	(WARMS 2013)	2013
K.Shiju, T.Praveen,P.Predeep.	Horizontal field effect mobility on Doped Elastomeric Thin Film Organic Field Effect Transistor	(WARMS 2013)	2013
Corresponding Author P.Predeep	Natural rubber based proton conductive membrane for fuel cell applicatiobs : A review	Proceedings of the 99th Indian Science Congress, Bhuvaneswar, 2012	2013
Corresponding Author P.Predeep	DSC Analysis of Low Density Polyethylene /Conducting Natural Rubber Nanoparticles Composites	Proceedings of the 99th Indian Science Congress, Bhuvaneswar, 2012	2013
Corresponding Author P.Predeep	Conducting Polypyrrole Intercated Elastomeric Composite by Plasma Polymerisation Technique	Proceedings of the 99th Indian Science Congress, Bhuvaneswar, 2012	2013
Corresponding Author P.Predeep	Effect of Iodine Doping On Polyamide Nylon 6 Films	Proceedings of the 99th Indian Science Congress, Bhuvaneswar, 2012	2013
Corresponding Author P.Predeep	Effect of Temperature on the Performance of Organic Light Emitting Diodes	Proceedings of the 99th Indian Science Congress, Bhuvaneswar, 2012	2013
Corresponding Author P.Predeep	Synthesis of Thermoresponsive Nanogels by Laser Irradiation	Proceedings of the 99th Indian Science Congress, Bhuvaneswar, 2012	2013
Corresponding Author P.Predeep	Preparation of Conducting Composite Film with Natural Rubber and Pedot: Pssfor Application in Optoelectronic Devices	Proceedings of the 99th Indian Science Congress, Bhuvaneswar, 2012	2013
Corresponding Author P.Predeep	Bistable Memory Device Based on Natural Rubber Molecules	Proceedings of the 99th Indian Science Congress, Bhuvaneswar, 2012	2013

- (b). Community Services
Dr. P. Predeep
- Member: IEEE
 - Member: Optical Society of America, (OSA)
 - Member of SPIE
 - Vice President: Thermophysical properties Society of India.
 - Member: Indian Society for the Scientists of Disordered Materials.
 - Life member of the Indian Association of Physics Teachers
 - Member, Indian Physics Association
 - Executive Committee member, Asian Thermophysical properties association
 - Member, Board of Editors, Research Journal of Pure and Applied Physics
 - Member, Editorial Board, Journal of Engineering and Applied Sciences

Dr. M.K. Ravi Varma

- Chairman – UG Admissions, at NIT Sikkim for CCB (AIEEE-2011)
- Member of the Institute Research and Consultancy Committee of NIT Calicut
- Reviewer of Project reports for Department of Science and Technology, New Delhi
- Reviewer of peer-reviewed journal articles for Optic Express, Optics Letters, Aerosol Science and Technology, Environmental Science and Technology
- Joint Coordinator, “INSPIRE-2011”, a winter science camp organized for 11th standard students at NITC during 18 – 22 December, 2011
- Co-convenor, “OPTICS’11 – A Conference on Optics” held in NIT Calicut, May 23 –25, 2011
- Member of – Air & Waste Management Association, American Association for Aerosol Research, American Geophysical Union, Optical Society of America

Dr. P.K. Madhavan Unni

1. Executive Committee Member, NITC-Staff Club
2. Judge for the state level INSPIRE Exhibition (organized by the Department of Science and Technology, Govt. of India) held at Kottayam on 27/08/2013.

Dr. Aji .A. Anappara

- (i).Assisted in GATE-2012 entrance examination

I. Other Academic and Administrative services

Name of staff	Academic and Administrative services
Dr. Raghu Chatanathodi	HOD Physics
Dr. Aji .A. Anappara	Examination In-charge, Dept. in charge of Library In-charge of dept. website, DC member of several students
Dr. M. K. Ravi Varma	1 year Physics (PH1001) coordinator
Dr. Vari Sivaji Reddy	Examination In-charge
Dr. P.K. Madhavan Unni	<ol style="list-style-type: none"> 1. Warden, PG-Flats (July. 2011 – present) 2. Faculty Advisor (Aug 2010 – present) B. Tech Engg. Physics (2010-Batch) 3. Class Committee Chairman (Monsoon and Winter Semester 2012-2013) Semester V, VI – B. Tech Engg. Physics Students, 2010 Batch) 4. Department Time-Table In-charge (Dec. 2010-July 2013) 5. B. Tech. Physics Lab (PH1091) Co-ordinator Monsoon Semester (July. 2012 – Dec 2012) 6. B. Tech. Physics Lab (PH1091) Co-ordinator Winter Semester (Dec. 2012 – May. 2013) 7. Invigilator for JEE 2011 (April 2012) 8. Course Faculty for the following courses: Monsoon Semester (Aug-Dec. 2011) : (1) PH7113 (S5-M.Sc. Tech Photonics) (2) PH1002 (S1-B. Tech, Introduction to Engg. Phys, Coordinator + Faculty) (3) PH8189 (S5-M. Sc. Tech. (Photonics))

	Mini-project (Co-ordinator) (4) PH1091 (B. Tech. Lab) (5) PHU403 (S7-B.Tech. Engg Phys) Winter Semester (Dec. 2011 – May 2012): (1) PH8152 (Critical Phenomena, Ph. D. Course) (2) PH3006 (S6- B. Tech. Engg. Physics) (3) PH8190 (S6-M. Sc. Tech. (photonics)) Major Project Course (Co-ordinator) (4) PH1091(B. Tech. Lab) (5) PH3007 (S6-B.Tech. EP, Sem-IV) (6) PH2006(S4-B. Tech. EP)
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(d). Conferences/Summer/Winter School/Short term courses/Workshops conducted

Sl. No.	Title	Coordinators	Duration & Period
1.	Development of Low Cost Science Experiments using Computers for Young Engineers, Scientists & Teachers	Dr. P. Predeep	May 24-26, 2012
2.	Laboratory Experiments in Electronics	Dr. P. Predeep	Aug 31 to Sep 01 2013
3.	Indian Science congress	Dr. P. Predeep	Jan 01, 2013
4.	Workshop on Photonics, NIT Goa	Dr. P. Predeep	
5.	Indo-german workshop, Delhi university	Dr. P. Predeep	

(e). Expert lectures delivered in Conferences/Seminar/Workshops:NIL

(f). Details of faculty, who acquired higher qualification:NIL

(g). Consultancy & Testing:NIL

PHYSICAL EDUCATION SECTION

a. Publications

i. Journal

Name of the Author	Title of Paper	Name of Journal	Vol, Year, p.p.
Dr. A.M Najeeb	"Interdisciplinary Approach of the Teaching of Olympic Principles to the students"	The Sports Journal, published by The United States Sports Academy	ISSN 1543-9518, Vol: 15, 2012

ii. International Conference

Name of the Author	Title of Paper	Name of International conference	Vol, Year, p.p
Dr. A M Najeeb	"Contribution of NIT Calicut to O V E P" National Olympic Committee, Amsterdam, Netherlands. (25 th to 27 th November, 2012)	8 th World Conference on Sport Education & Culture co-hosted by I O C and U N E S C O	
----do----	" Olympic Values Education Programme in Campus" 17 to 19 April 2012, New Delhi.	1st International Conference on Sports Economics & Vision of London Olympics 2012 hosted by Delhi University Sports Council	

iii.National Conference: NIL

b. Community Services:NIL

c. Other Academic and Administrative Services:NIL

d. Conferences/Summer/Winter School/Short term Courses/ Workshops conducted:NIL

e. Expert lecturers delivered in Conferences/Seminar/workshops:NIL

f. Details of Faculty, who acquired Higher Qualification:NIL

g. Consultancy and testing:NIL

h. Patents acquired and filed:NIL

i. Student achievements:NIL

SCHOOL OF NANO SCIENCE & TECHNOLOGY

a. Publications

i. Journal

Name of the Authors	Title of the paper	Name of Journal	Volume, Year, PP.
Ajin C Sajeevan and V. Sajith,	"Diesel Engine Emission reduction using Catalytic nanoparticles: An Experimental Investigation",	Journal of Engineering,	Vol. 2013, Article ID 589382
Ajin C Sajeevan and V. Sajith	A study on Oxygen storage capacity of Zirconium Cerium oxide nanoparticles",	Advanced Materials Research,	Vol.685 (2013), pp 123 -127
S Balamurugan and V. Sajith,	" Stabilization studies of Zirconium Cerium oxide nanoparticles Diesel suspension",	Advanced Materials Research,	Vol.685(2013), pp 128 -133
Harish Ganapathy and V. Sajith,	"Semi – analytical modeling of pool boiling of Nanofluids",	International Journal of Heat and Mass Transfer,	57 (2013) pp.32 – 47
R.Krishna Sabareesh, N.Gobinath, V.Sajith, Sumitesh Das and C.B.Sobhan, "	Application of TiO ₂ nanoparticles as lubricant additive for Vapor compression refrigeration systems – An experimental investigation",	International journal of Refrigeration,	35(2012), pp. 1989 – 1996.
V. Sajith and C. B. Sobhan,	"Characterization of Heat dissipation from a Microprocessor chip using Digital Interferometry",	IEEE Transactions on Components and Packaging Technologies,	Issue 99,10.1109/TCPMT.2012.2199756, 2012.
Manjusha Mathew, N. Sandhyarani	A highly sensitive electrochemical glucose sensor structuring with nickel hydroxide and enzyme glucose oxidase	Electrochimica Acta	108, 2013, 274-280.
ParvathyR Chandran, Prakash A, K Rathinasamy, N. Sandhyarani,	Enhanced cytotoxic effect of doxorubicin loaded multifunctional gold nanoparticle for targeted cancer drug delivery,	Journal of Nanopharmaceutics and Drug Delivery,	1(3),2013, 1-12.
Reny Thankam Thomas, N. Sandhyarani,	Enhancement in the photocatalytic degradation of low density polyethylene-TiO ₂ nanocomposite films under solar irradiation,	RSC Advances	3, 2013, 14080-14087.

Reny Thankam Thomas, Vaishakh Nair, N. Sandhyarani,	TiO ₂ nanoparticle assisted solid phase photocatalytic degradation of polythene film: A mechanistic investigation,	Colloids and Surfaces A: Physicochemical and Engineering Aspects,	422, 2013, 1-9
Binoy Baby, C. B. Sobhan	Investigations on Forced Convection in a Meso-Channel with Irregular Cross-section,	AIAA Journal of Thermophysics and Heat Transfer	Vol. 27, No. 1, 2013, pp. 70-79
G. Carbajal, C. B. Sobhan, G.P.Peterson	Symmetrical Porous Surfaces for Boiling Enhancement in Mini-channels: Effects on Liquid Pressure Drop	Journal of Enhanced Heat Transfe	Vol. 20, No. 1, 2013, pp. 73-81
K. Raji, C. B. Sobhan	Simulation and Modeling of Carbon Nanotube Synthesis: Current Trends and Investigations	Nanotechnology Reviews	Vol. 2, No.1, 2013, pp. 73-105.
Shijo Thomas, K. Sarun Kumar, C. B. Sobhan	Flow Measurements in Metal Oxide- Nanoparticle Suspensions in a Rectangular Natural Circulation Loop,	Advanced Materials Research	Vol.685, 2013, pp. 145-149.
R. Krishna Sabareesh, N. Gobinath, V. Sajith, Sumitesh Das, C. B. Sobhan	Application of TiO ₂ nanoparticles as a lubricant-additive for vapor compression refrigeration systems – An experimental investigation	International Journal of Refrigeration	Vol. 35, No. 7, 2012, pp. 1989- 1996.
Shijo Thomas, C. B. Sobhan, G. P. Peterson	Synthesis of Stable Nanoparticle Suspensions for Thermal Engineering Applications: Advances and Challenges	Special Edition on Application of Nanomaterials , Studium Press, USA(Invited Boodl Chapter)	2012
Shijo Thomas, C. B. Sobhan	Application of Oxide- Water Nanofluids in Forced Convection Loops: Performance Evaluation	<i>Nanofluids: Research, Development and Applications</i> , Nova Science Publishers, Inc (Invited Book Chapter)	2012
V. Sajith, C. B. Sobhan	Characterization of Heat Dissipation from a Microprocessor Chip using Digital Interferometry	IEEE Transactions on Components, Packaging and Manufacturing Technology	Vol. 2, No.8, 2012, pp. 1298-1306
Binoy Baby, C. B. Sobhan	Investigations on Forced Convection in Compact Passages with Surface Irregularities	Heat Transfer Engineering	Vol. 33, No. 13, 2012, pp. 1105- 1119

Nandu Gopan and Sarith P. Sathian	Molecular Dynamics Studies in Nanoscale Liquid Structures: Geometry and Thermal Effects on Nanojet,	Molecular Simulation	38, 179-188 (2012)
Nandu Gopan and Sarith P. Sathian	The role of thermal fluctuations on the formation and stability of nano-scale drops,	Colloids and Surfaces A: Physicochemical and Engineering Aspects	432, 19 (2013)
Sooraj K. Prabha and Sarith P. Sathian	Molecular-dynamics study of Poiseuille flow in a nanochannel and calculation of energy and momentum accommodation coefficients,	Phys. Rev. E	85, 041201 (2012)
Sooraj K. Prabha and Sarith P. Sathian	Determination of accommodation coefficients of a gas-mixture in a nanochannel with molecular-dynamics,	Microfluidics and Nanofluidics	13, 883 (2012)
Sooraj K. Prabha and Sarith P. Sathian	Computational study of thermal dependence of accommodation coefficients in a nano-channel and the prediction of velocity profiles	Computers & Fluids	68, 47 (2012)
Sooraj K. Prabha and Sarith P. Sathian	Calculation of thermo-physical properties of Poiseuille flow in a nano-channel,	International Journal of Heat and Mass Transfer .	58, 217 (2013)
Jeetu S. Babu and Sarith P. Sathian,	Combining molecular dynamics simulation and transition state theory to evaluate solid-liquid interfacial friction in carbon nanotube membranes,	Phys. Rev. E	85, 051205 (2012)
Sachin Krishnan, Jeetu S. Babu and Sarith P. Sathian,	A molecular dynamics study on the effect of thermostat selection on the physical behavior of water molecules inside single walled carbon nanotubes	Journal of Molecular Liquids,	In Press
Ragesh Chellattoan and Sarith P. Sathian	The effect of torsional deformation on thermal conductivity of mono-, bi- and trilayer 144ommitte nanoribbon	Solid State Communications	In Press
Sooraj K. Prabha, Sreehari P. D., Murali Gopal M., and Sarith P. Sathian,	The effect of system boundaries on the mean free path for confined gases,	AIP Advances	3, 102107 (2013)
Ravi Varma Arun, Thomas Shijo	Simulation, Design and Development of a High Frequency Corona Discharge Ignition System	SAE International, SAE-2013-26-0014	January 2013. doi: 10.4271/2013-26-0014

Robin Joyce, Kulwant Singht,Himani Sharma, Soney Varghese and J. Akhtar	Low cost anodic bonding for MEMS packaging applications	Microsystem Technologies	2013
Uvais V. N and Soney Varghese	Polyvinylidene fluoride- trifluoroethylene/ barium titanate nanocomposite for ferroelectric non- volatile memory devices	AIP Advances, (American Institute of Physics)	3,(2013),042131
Kulwant Singht, Robin Joyce, Soney Varghese and J. Akhtar	A new method for fast anodic bonding in microsystem technology	Microsystem Technologies (Springer)	2013
D.M Rao, K.N Sharafudeen, K. Chandrasekharan, Soney Varghese	Third order nonlinear optical properties of azomethine derivatives	Optics communications	287 (2013) 224-227

ii. International conference

1. Abdul Rasheed P., N. Sandhyarani, A sandwich DNA electrochemical biosensor for sub femto molar detection of specific DNA sequences using labelled gold nanoparticles, First Indo-canadiansymposium, Mysore, Karnataka, 2013
2. Parvathy R. Chandran and N. Sandhyarani, Evaluation of size and pH sensitivity of the drug delivery system for the effective anticancer drug delivery, First Indo-Israel meeting, Mg Univeristy, Kottayam, 2013 (BEST POSTER AWARD)
3. Krishnadas Narayanan Nampoothiri, N. Sandhyarani, Graphene supported metal nanoparticles as anode material for direct methanol fuel cell, First Indo-Israel meeting, Mg Univeristy, Kottayam, 2013
4. K. Raji and C. B. Sobhan, A computational model for predicting the mass tranport in a CVD reactor for carbon nanotube synthesis, Proceed. SPIE 8973, 4th International conference on smart materials and nanotechnology in engineering, Gold Coast, Australia, Aug 2013.
5. Shijo Thomas, C B Sobhan, Jaime Taha-Tijerina, T. N. Narayanan and P. M. Ajayan, "Investigations on transient natural convection in boron nitride-mineral oil nanofluid systems", IMECE2012-87420, ASME 2012 International Mechanical Engineering Congress & Exposition (IMECE2012), November 9-15, 2012, Houston, Texas, USA

iii. National Conference :

1. Reny Thankam Thomas and N Sandhyarani, Photocatalytic titania nanostructures , National Conference on 'Emerging Interfaces at Molecular Materials' IIT Madras, Chennai, 2013

b. Community Service: NIL

c. Other academic and administrative services:

Name of Staff	Academic and administrative services
Dr.Sajith.V	1.Faculty in charge of Institute Vehicles 2.Member, Curriculum revision Committee,SNST 3.Member, Students Guidance Cell, SNST 4.Member, IRCC,SNST 5.Faulcty in charge, Fuels & Combustion Research Lab

	6. Time table in charge, School of Nano Science and Technology 7. Member, Purchase Committee, SNST, PHYSICS, SOMS 8. Faculty Advisor, SAE Collegiate Club, NITC
N. Sandhyarani	B Tech First Year Coordinator
Sarith P Sathian	1. Faculty in Charge, Central Computer Center, NITC 2. Coordinator, M Tech Nanotechnology 3. Coordinator, PhD Programme, SNST
Shijo Thomas	1. Staff Secretary, SNST 2. Faculty in charge, SNST Association 3. Staff Editor, TechNanos Newsletter 4. Member NITC Faculty Grievance Redressal Committee 5. Staff Advisor, SAE India Collegiate Club 6. Staff Advisor, ENQUIRE Quiz Club

d. Conferences/Summer/Winter school/short term courses/workshop conducted:

Duration	Event(s)
July 2012	FDP on Characterisation Techniques in Nanotechnology at SNST, NIT Calicut
11-13, July 2012	National workshop on Nanotechnology, Sponsored by NTPC, held at NTPC Training Centre, Noida, UP

e. Expert lectures delivered in Conferences/Seminar/workshops:

Sl. No.	Name of Staff	Title of the programme	Duration and period	Organisation
1	N. Sandhyarani	Medcon-13	February 5 th 2013	Sahrdaya College of Engineering, Thrissur
2	C. B. Sobhan	Short Term Course on Recent Advancements in Microfluidics	Jan 4-18, 2013	I. I. T. Madras
3	C. B. Sobhan	Short term course on Thermal Management of electronic Equipment	Feb 4-8, 2013	PES IT Bangalore

f. Details of faculty who acquired higher qualification: NIL

g. Consultancy and Testing:

Sl. No.	Nature of Service	Organisation	Revenue Earned	Status
1	Testing and estimation of the efficiency of Induction gas stove	Enercons Corporations, Kochi	Rs 5000/-	Completed

h. Patent acquired and filed

Sl. No.	Names of staff	Title	Year
1	Sajith V., Shijo Thomas, Hanas T. and C B Sobhan	A process for determining lubricant composition in a vapour compression refrigeration system to enhance the coefficient of performance. Pub. No.: WO/2012/156980; 22.11.2012	Filed in 2011 and published in 2012

2	Hanas T., Shijo Thomas, Sajith V. and C B Sobhan	A system for determining material surface erosion caused by impingement of nanofluids on pipes carrying nanofluids. Indian Patent Filing no: 181/KOL/2011 dated 11.2.2011	Filed on 2011
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i. Students achievements:

Raji K. Ph.D scholar obtained Fulbright-Nehru Fellowship to perform research at Rice University, USA.

SCHOOL OF MANAGEMENT STUDIES

a. Publications

i. Journal :

Name of the Author	Title of Paper	Name of Journal	Vol, Year, p.p.
Muhammad Shafi	India in league of developed nations through service sector led growth: a case of venture capital and private equity investments	International Journal of Engineering and Management Sciences ISSN 2229-6425	(15-April 2012 pp. 170-183
Muhammad Shafi	Developing global competitiveness in higher Education services in India under general Agreement on trade in services (GATS :)	International Journal of Management Studies, Statistics & Applied Economics (IJMSAE), ISSN 2250-0367,	Vol.2, No. 1 (June 2012), pp. 107-128

ii. International Conference: NIL

iii. National Conference: NIL

b. Community Services: NIL

c. Other Academic and Administrative Services: NIL

d. Conferences/Summer/Winter School/Short term Courses/ Workshops conducted: NIL

e. Expert lecturers delivered in Conferences/Seminar/workshops: NIL

f. Details of Faculty, who acquired Higher Qualification: NIL

g. Consultancy and testing: NIL

h. Patents acquired and filed: NIL

i. Student achievements : NIL

SCHOOL OF BIOTECHNOLOGY

a. Publications

i. Journal publications: 13

Name of the Authors	Title of the paper	Name of conference	Publications/Journal
Kabir, M. A., Hussain, M. A. and Ahmad, Z.,	Candida albicans: A model organism for studying fungal pathogens	-	ISRN Microbiology, volume 2012, Article ID 538694, 15 pages
Aswati Nair R and George Thomas	Functional genetic diversity at nucleotide binding site (NBS) loci: Comparisons among soft rot resistant and susceptible <i>Zingiber</i> taxa.	-	Biochemical Systematics and Ecology (2012) 44, 196-201

Aswati Nair R and George Thomas	Molecular characterization of <i>ZzR1</i> resistance gene from <i>Zingiber zerumbet</i> with potential for imparting <i>Pythium aphanidermatum</i> resistance in ginger.	-	Gene (2013) 516(1), 58-65
Geethu C, Sumna S, Resna AK and Aswati Nair R	Hyphal and zoospore lysis underlies the mechanistic basis for inhibitory effect of paromomycin on <i>Pythium myriotylum</i> .	-	Fungal Genomics and Biology (2013) 3(1): doi 10.4172/2165-8056.1000107
Geethu C, Resna AK and Aswati Nair R	Characterization of major hydrolytic enzymes secreted by <i>Pythium myriotylum</i> , causative agent for soft rot disease.	-	Antonie van Leeuwenhoek J of Microbiology (2013) (Accepted) DOI 10.1007/s10482-013-9983-4
Resna AK, Geethu C, Sumna S, Jaleel UC and Aswati Nair R.	Experimental and theoretical investigations on the anti-oomyceteous activity of paromomycin targeted against <i>Pythium tubulin</i>	-	Prospects in Bioscience: Addressing the issues (2013) Springer, First edition, Eds. Sabu A and Augustine A (ISBN: 978-81-322-0809-9), pp: 363-372
Rajanikant GK.	Editorial: neuroprotection and neuroregeneration in ischemic stroke: emerging treatment strategies and potential molecular targets.	-	Current Drug Targets, 2013 Jan 1;14(1):1-2.
Teli MK, Rajanikant GK.	Pharmacophore generation and atom-based 3D-QSAR of novel quinoline-3-carbonitrile derivatives as Tpl2 kinase inhibitors.	-	Journal of Enzyme Inhibition and Medicinal Chemistry, 2012 Aug;27(4):558-70.
Pradeep H, Rajanikant GK.	A rational approach to selective pharmacophore designing: an innovative strategy for specific recognition of Gsk3 β .	-	Molecular Diversity, 2012 Aug;16(3):553-62.
Teli MK, Rajanikant GK.	Pharmacophore generation and atom-based 3D-QSAR of N-isopropyl pyrrole-based derivatives as HMG-CoA reductase inhibitors.	-	Organic and Medicinal Chemistry Letters, 2012 Jul 2;2(1):25.
Nair SB, Teli MK, Pradeep H, Rajanikant GK.	Computational identification of novel histone deacetylase inhibitors by docking based QSAR.	-	Computers in Biology and Medicine, 2012 Jun;42(6):697-705.
Pradeep H, Rajanikant GK.	Nanochannels: biological channel analogues.	-	IET Nanobiotechnology, 2012 Jun;6(2):63-70.
Bae ON, Rajanikant K, Min J, Smith J, Baek SH, Serfozo K, Hejarian S, Lee KY, Kassab M, Majid A.	Lymphocyte cell kinase activation mediates neuroprotection during ischemic preconditioning.	-	Journal of Neuroscience, 2012 May 23;32(21):7278-86.

ii. International Conference: 2

Name of the Author	Title of Paper	Name of International Conference	Vol, Year, p.p.
Keerthi Divakaran, Resna AK and Aswati Nair R	Variability of terpenoid defense against <i>Pythium myriotylum</i> in cultivated and wild species of <i>Zingiber</i> (Zingiberaceae).	6 th International Symposium on the family Zingiberaceae	Vol. 1 (2012) pp 91
Ganapathy G, Sumna S and Aswati Nair R	Molecular characterization of <i>Zingiber zerumbet</i> (Zingiberaceae) chalcone synthase gene: a genomic approach to study anthocyanin content variation in cultivated ginger and its wild congener.	6 th International Symposium on the family Zingiberaceae	Vol. 1 (2012) pp 66

iii. National Conference: 1

Name of the Author	Title of Paper	Name of National Conference	Vol, Year, p.p.
Yuavaraja KR, Jayaprakash S, Santhiagu A	Antioxidant and hepatoprotective activity of <i>Dipteracanthus patulus</i> (Jacq.) Nees (Acanthaceae) against paracetamol induced liver damage in rats	National Conference on Phytomedicine	2012, pp. 128-129

b. Community Services:

Organized a laboratory demonstration programme for students of GHS School, Mavoor on 19.11.2011.

c. Other Academic and Administrative Services: Nil

d. Conferences/Summer/Winter School/Short term Courses/ Workshops conducted

e. Expert lecturers delivered in Conferences/Seminar/workshops

Sl. No.	Name of Staff	Title of the Programme	Duration and Period	Organization
1.	Rajanikant GK	Faculty Development Program on Bioinformatics - Algorithms, Databases and Tools (BIOADT)	2012	Dept. of Computer Science and Engineering, NITC

11.0 ANNEXURES

11.1 INSTITUTE'S SENATE

1. Dr. M N Bandyopadhyay, Director & Chairman
2. Dr. V K Govindan, Dean (Academic)
3. Dr. V. Mustafa, Dean (P&D)
4. Dr. R Vijayakumar, Dean (FW)
5. Dr. C. Muraleedharan, Dean (SW)
6. Dr. Jose Mathew, Dean (R&C)
7. Dr. A. Kalanidhi – External Member
8. Dr. R. M. Vasu – External Member
9. Dr. Evangeline Manickam – External Member
10. Dr. S. D. Madhukumar, Professor & Head, CSED
11. Dr. Priya Chandran, Professor, CSED
12. Dr. P. Vineeth Kumar, Professor, CSED
13. Dr. P. S. Sathidevi, Professor & Head, ECED
14. Dr. Elizabeth Elias, Professor, ECED
15. Dr. Lilly Kutty Jacob, Professor, ECED
16. Dr. P. C. Subramaniam, Professor, ECED
17. Dr. Paul Joseph, Professor, EED
18. Dr. Abraham T. Mathew, Professor, EED
19. Dr. R. Sreeram Kumar, Professor, EED
20. Dr. Susy Thomas, Professor & Head, EED
21. Dr. Jeevamma Jacob, Professor, EED
22. Dr. K. S. Sivanandan, Professor, EED
23. Dr. M. V. Vaidyan, Professor, EED
24. Dr. Ashok S., Professor, EED
25. Dr. T. P. Somasundaran, Professor, CED
26. Dr. N. Ganesan, Professor, CED
27. Dr. S. Chandrakaran, Professor, CED
28. Dr. P. Syamala, Professor & Head, CED
29. Dr. A. M. Mohammed Ameen, Professor, CED
30. Dr. M. V. L. R. Anjaneyulu, Professor, CED
31. Dr. A. P. Shashikala, Professor, CED
32. Dr. N. Sankar, Professor, CED
33. Dr. Zacharia Varghese T., Professor CED

34. Dr.J.Sudhakumar, Professor, CED
35. Dr.P.V.Indira, Professor, CED
36. Dr.T.M.Madhavan Pillai, Professor, CED
37. Dr.R.Sreedharan, Professor & Head, MED
38. Dr.K.Prabhakaran Nair, Professor, MED
39. Dr.S.Jayaraj, Professor, MED
40. Dr. K Allesu, Professor, MED
41. Dr.N.Ramachandran, Professor, MED
42. Dr. P K Rajendrakumar, Professor, MED
43. Dr. A Ramaraju, Professor, MED
44. Dr.M.L.Joy, Professor, MED
45. Dr.T.K.Suresh Babu, Professor, T&P
46. Dr.C.B.Sobhan, Professor, SNST
47. Dr.P.P.Anil Kumar, Professor & Head, Arch, Invitee
48. Dr.Lity Alen Varghese, Head, CHED, Invitee
49. Dr.A.Santhiagu, HOD, SBT
50. Dr.C.Raghu, Head, Physics, Invitee
51. Dr.P.Predeep, Professor, Physics
52. Dr. G Unnikrishnan, Professor, Chemistry
53. Dr.C.Lakshmi, HOD, Chemistry, Invitee
54. Dr.M.J.Jacob, Professor, Maths
55. Dr.Jessy John, Professor, Maths
56. Dr.V.Narayanan, HOD, Maths, Invitee
57. Dr.N.Sudarsan, Professor & Head, SOMS, Invitee
58. Dr.Santosh G.Thampi, Registrar & Secretary

11.2 BOARD OF GOVERNORS

1.	Chairman	Dr. C.G. Krishnadas Nair, Hony. President , Society of Indian Aerospace Technologies & Industries AeSI Building, Suranjandas Road, Off:Old Madras Road, Bangalore - 560075(Karnataka)
2.	Ex. Officio Member	Dr. M N Bandyopadhyay, Director, National Institute of Technology, Calicut (Kerala)
3.	Member	Special Secretary or Additional Secretary or Joint Secretary dealing with Technical Education, Department of Higher Education, Ministry of Human Resource Development, New Delhi
4.	Member	Financial Advisor, Department of Higher Education, Ministry of Human Resource Development, New Delhi
5.	Member	Prof. M Vijayan, Distinguished Professor and Homi Bhabha Chair, Molecular Bio Physics Unit, Indian Institute of Science, Bangalore - 560012(Karnataka)
6.	Member	Smt. Uma Pillai, IAS Former Secretary, Ministry of Tourism and Former Secretary, Department of Defence Production & Supplies, Government of India
7.	Member	Dr. P.Vineeth Kumar, Professor (CSED), NIT Calicut.
8.	Member	Dr.Sameer S.M., Associate Professor (ECED), NIT Calicut.
9.	Member	Adv.P.M.Suresh Babu, Nominee of the Govt. of Kerala
10.	Member	Dr.K.Shoukkath Ali, Nominee of the Govt. of Kerala
11.	Secretary	Registrar, National Institute of Technology, Calicut (Kerala).

11.3 FINANCE, BUILDING AND WORKS AND OTHER COMMITTEES

MEMBERS OF THE FINANCE COMMITTEE

1	Chairman, BOG	Dr. C.G. Krishnadas Nair, Hony. President , Society of Indian Aerospace Technologies & Industries AeSI Building, Suranjandas Road, Off:Old Madras Road, Bangalore - 560075(Karnataka)
2	Member	Dr. M N Bandyopadhyay, Director, National Institute of Technology, Calicut (Kerala)
3	Member	Special Secretary or Additional Secretary or Joint Secretary dealing with Technical Education, Department of Higher Education, Ministry of Human Resource Development, New Delhi
4	Member	Financial Advisor, Department of Higher Education, Ministry of Human Resource Development, New Delhi

5	Member	Smt. Uma Pillai, IAS Former Secretary, Ministry of Tourism and Former Secretary, Department of Defence Production & Supplies, Government of India
6	Member	Dr. P.Vineeth Kumar, Professor (CSED), NIT Calicut.
7	Secretary, BOG	Registrar, National Institute of Technology, Calicut (Kerala).

MEMBERS OF BUILDINGS AND WORKS COMMITTEE

Sl. No	Name	Address
1	Dr.M.N.Bandyopadhyay	Director, National Institute of Technology, Calicut, NIT Campus PO, Calicut 673 601
2	Dr.S.Chandrakaran	Professor,CED, NIT Calicut.
3	Registrar	Secretary (BWC), NIT Calicut.
4	Dr. K.Krishnamurthy	Executive Engineer, NIT Calicut.
5	Dr.V.Mustafa	Dean, Planning & Development
6	Dr.Muralikrishnan K.	Associate Professor, CSED, NIT Calicut - Nominee of BOG
7	Shri.Rajesh Singh	Dy. Secretary (NITC), Dept. of Education, MHRD, Sasthribhavan, New Delhi – 110 015
8	Sri.K.Sundaran,	Chief Engineer, Office of the Chief Engineer, Local Self Govt. Dept.,3 rd Floor, Revenue Complex, Public Office Compound, Thiruvananthapuram - 695 033Ph: 0471 2324951 Mobile No. 9447009951, 9447455486
9	Shri.S.V. Avudaiappan	Executive Engineer (Elec.), CPWD, Kakknad,Kochi.Mobile No. 9446073729

11.4 RESEARCH PROJECTS AND CONSULTATION JOBS

DEPARTMENT OF CHEMICAL ENGINEERING

Sl. No	Title of the Project	Investigators	Sponsoring agency	Year of starting	Amount (Rs)	Status
1.	Experimental and Deterministic Model studies in regeneration of biosorbents in packed bed column	Dr. N Selvaraju	DST Fast Track	2013	8,82,000	Ongoing

DEPARTMENT OF CIVIL ENGINEERING

Sl No	Title of the Project	Investigators	Sponsoring agency	Year of starting	Amount (‘)	Status
1	Seismic Evaluation of Existing Multi-storey buildings in Kozhikode district"	Dr. Praveen Nagarajan, Dr. A P Shashikala	KSCSTE, Kerala	2011	9.9 lakhs	On going
2	Development of an Interoperable Spatial Database of Road Network for Calicut District	Dr. M.VL.R.Anjaneyulu	NRDMS DST, Govt. of India	2008	16.81 lakhs	On going
3	Investigation of Performance Characteristics of modified bituminous mixtures	Dr. M.VL.R.Anjaneyulu	Kerala State Council For Science, Technology And Environment	2008	10.21 lakhs	Completed
4	Development of Activity based Models for Forecasting of Travel Demand, in collaboration with Centre of Excellence in Urban Transport	Dr. M.VL.R.Anjaneyulu	Indian Institute of Technology Madras, sponsored by Ministry of Urban Development	2010	9.99 lakhs	On going

5	Development of A Toolbox for Evaluation and Identification of Urban Road Safety Improvement Measures, in collaboration with Centre of Excellence in Urban Transport	Dr. M.VL.R.Anjaneyulu	Indian Institute of Technology Madras, sponsored by Ministry of Urban Development	2010	15.00 lakhs	On going
6	Simplified Models for Torsional Mode Prediction of Tall Buildings under Earthquake	Dr. T P Somasudaran	Kerala State Council For Science, Technology And Environment	2009	11.90 lakhs	On going
7	Use of Coir Pith for Airport Soft Ground Arrester System	Dr. MVL R Anjaneyulu; Dr. S. Chandrakaran, Dr. A.P. Shashikala, Dr. K. Rangaswamy, and Sri. Sajith A.S.	Coir Board, MMSME, GOI, Kochi, Kerala.	2011	113.124 lakhs	On going
8	Study of Long Term Performance Of Pavements Reinforced With Coir Geotextiles	Dr. MVL R Anjaneyulu	Coir Board, MMSME, GOI, Kochi, Kerala	2011	268.114 lakhs	On going
9	Development of Risk Management Tool for Green Construction Sites	Dr. C Arun	Kerala State Council for Science Technology and Environment (Rs 8,80,000/-)	2012	8.80	On going
10	Development of Productivity Monitoring and Wage Analysis Tool for MGNREGA Works in Kerala	Dr. C Arun	Ministry of Rural Development, Govt. of India	2012	16.78	On going
11	Black Spots Identification and Improvement Measures on NH-212 and NH-213 in KERALA	Dr. K Krishnamurthy	Faculty Research Grant (FRG) of NIT Calicut	2010	4.65	Completed
12	Assessment of Effectiveness of NH-47 Bye-pass Road in Coimbatore in Congestion Relief and Level-of-Service (LOS) Improvement in Traffic Flow on NH-47 in Coimbatore City using Microscopic Simulation Technique (SERC/ET-0108/2010)	Dr. K Krishnamurthy	SERC Division, DST, India	2013	6.24	On going
13	Non-linear dynamic analysis of Soil-Structure Interaction	Dr. K. Ranga Swamy	NITC, FRG	2010	3.82	On going
14	Antibiotics Removal from Wastewater using Membrane-Photocatalytic Slurry Reactor System (SERC/ET-310/2011)	Dr. S Mathava Kumar	SERC Divison, DST, India	2013-2016	21.80	On going

DEPARTMENT OF ELECTRICAL ENGINEERING

Sl. No	Title of the project	Investigators	Sponsoring Agency	Year of Starting	Amount (Rs)	Status
1.	"A Closed Loop Control Strategy for Selective Harmonic Detection and Elimination for Generic Multilevel Inverter Configuration"	Dr. Mukthi Barai.	FRG-NITC	2011	5 Lakhs	Ongoing
2.	Development of composite insulators for high energy storage applications	Sindhu T K	DST-FT	2011	24 Lakhs	ongoing

3.	Development of nano composite insulators.	Sindhu T K	FRG-NITC	2011	5 Lakhs	ongoing
4.	Development of Centre for Distributed Energy Research'	Dr. Ashok S	DST-FIST	2009	100 lakhs	ongoing
5.	Development of intelligent robot for fault diagnosis of power lines	Dr. Ashok S	KSCSTE	2011	11 lakhs	ongoing
6	Non-Linear Signals in patients with Alzheimers	Smt. Subha D P	DST-FT	2011	17 Lakhs	ongoing

DEPARTMENT OF ELECTRONICS & ENGINEERING

Sl. No.	Title of the Project	Investigators	Sponsoring Agency	Year of Starting	Amount (Rs)	Status
1	Design and Development of Protocol Stack for Underwater Acoustic Sensor Networks	A.V. Babu & Lillykutty Jacob	Naval Research Board	2013	30 Lakhs	ongoing
2	Design and simulation of pressure sensor for ocean depth measurement	Suja K J	NITC(FRG)	2012	5 Lakhs	Ongoing
3	Design and analysis of protocols for underwater acoustic sensor networks	Ameer P M	NITC(FRG)	2010	5 Lakhs	Active
4	VLSI Architecture for DSP Application	Jayakumar E.P.	NITC(FRG)	2010	5 Lakhs	Ongoing
5	Encryption and authentication of multimedia data	Sudhish N George	NITC (FRG)	2010	4.5 Lakhs	ongoing

DEPARTMENT OF MECHANICAL ENGINEERING

Sl. No	Title of the Project	Investigators	Sponsoring agency	Year of starting	Amount (Rs)	Status
1	Development of Tools and Techniques for modeling and analysis of world-class manufacturing systems	Dr. R. Sridharan Co- Investigators: Dr. V. Madhusudanan Pillai, Dr. T. Radha Ramanan	AICTE	2009-2014	25 lakhs	Ongoing
2	'Investigations on Bio-hydrogen production by Thermo cheml Method in Fluidised Bed Gasifier and its Utilization	PI: Dr C Muraleedharan Co-PI: Dr Arun P	MNRE	30 Months	Rs. 3453450	Ongoing
3	Productivity Monitoring and Wage Analysis Tool for NREG Works in Kerala	Dr. V. Madhusudanan Pillai, MED and Dr. Arun C., CED	Ministry of Rural Development (MNREGA division), Government of India	3 years	Rs 16.78 Lakhs	Ongoing
4	Development of rates for the Mahatma Gandhi National Rural Employment Guarantee Scheme (NREGS) – Time and Motion Study – Phase 2	Dr. V. Madhusudanan Pillai, MED	Local Self Government Department, Kerala	3 years	Rs 3 Lakhs	Ongoing
5	Heating Ventilation and Air-conditioning (HVAC) of Buildings with Emphasis on Passive Technologies	Mr. Gangadhara Kiran Kumar L	NITC, MHRD	5 Years	5,00,000	On going

DEPARTMENT OF MATHEMATICS

Sl. No	Title of the Project	Investigators	Sponsoring agency	Year of starting	Amount (Rs)	Status
1	Surface temperature reconstruction from free surface data in thin film on stretching sheet	Dr. S. Panda and Dr. M. K. Abeyratne	Indo-Sri Lanka Foundation	11/2011-5/2012	Rs. 3,60,00.00	Final report submitted
2	Fiber Dynamics, Asymptotic Analysis, MHD fluid	Dr. S. Panda	FRG NIT	9/2008-8/2012	Rs. 4, 95, 460.00	Final report submitted
3	Applications of partial cuts in weighted graphs	Sunil mathew	FRGNITC	2010	5 lakhs	Ongoing

DEPARTMENT OF CHEMISTRY

Sl. No	Title of the Project	Investigators	Sponsoring agency	Year of starting	Amount (Rs)	Status
1	Development and characterization hierarchical zeolites for fine chemical synthesis	Dr. G. Unnikrishnan	DST	2012	50.09 lakhs	Progressing
2	Development of nanocomposites from EVA, chitin, Fibres	Dr. G. Unnikrishnan	British Council	2009	1 lakhs+ GBP	Continues
3	Development of Pro-fluorophore scaffolds to study peptide aggregation and conformational transitions	Dr. Lakshmi C	DST	2011	20.7 Lakhs	Ongoing
4	Design and synthesis of Spiropyran-Based Size Tunable Ionophores - Modular Systems for Ion-transport, Sensing and Antimicrobial Properties	Dr. Lakshmi C	FRG, NITC	2010	5 lakhs	Ongoing
5	Biodegradability enhancement of polyethylene by using biopolymer nanoparticles	Dr. A. Sujith	DST	2012	25.2 lakhs	Ongoing

6	Low density polyethylene/nanochitosan biodegradable films for food packaging applications	Dr. A. Sujith	KSCSTE	2012	11.6 lakhs	Ongoing
7	Poly(3,4-ethylenedioxythiophene)/Poly(methyl methacrylate) core-shell nanospheres for the fabrication of transparent and conductive thin films	Dr. A. Sujith	CSIR	2012	17 lakhs	Sanctioned
8	Development of Au(III) complexes as antiproliferative agents 'Dean(C&SR)/FRG10-11/0105'	Dr. Suni Vasudevan	Faculty Research Grant, NIT Calicut	2010	5 Lakhs	Ongoing
9	Novel Functionalized Porphyrinic Coordination Arrays, Polymers and Frameworks: Synthesis and Properties	Dr. C. Arunkumar	DST	2012	21.8 lakhs	Ongoing
10	Novel triazole bridged metalloporphyrins formed via click chemistry: Comparative DNA binding and cleavage studies (Scientist Mentor)	Dr. Sujatha (PI), Dr. C. Arunkumar (Scientist Mentor)	DST	2012	23.6 lakhs	Ongoing
11	A theoretical study on the enzymatic catalysis by methane mono-oxygenase: Designing of biomimetic catalyst for the conversion of methane to methanol"	Dr. Susmita De (PI) Dr. C. Arunkumar (Scientist Mentor)	DST	2012	25.5	Ongoing
12	Design of Uranium Based Catalyst for Activation and Functionalization of N ₂ and CO: A Computational Quantum Mechanical Study	Dr. Parameswaran P.	DST	2012	25.5 lakhs	Ongoing
13	Activation of Inert Molecules and Oligomerization Reactions of Alkynes by Uranium Complexes: A Quantum Mechanical Investigation	Dr. Parameswaran P.	Faculty Research Grant, NIT Calicut	2010	5 lakhs	Ongoing

DEPARTMENT OF PHYSICS

Sl. No.	Title of the project	Investigators	Sponsoring Agency	Year of starting	Amount (Rs.)	Status
1.	Development of low cost energy storage devices fuel cells and supercapacitors from CIS 1,4 polyisoprene (natural rubber)	Dr. P. Predeep	KSCSTE	2012	15,70,000	Ongoing
2.	Development of low cost elastomeric Fullerene derivatives using electron and gamma irradiation for organic electronic application	Dr. P. Predeep	BRNS	2013	19,30,800	Ongoing
3.	Cavity enhanced absorption spectroscopy for trace pollutant monitoring	Dr. M. K. Ravi Varma	DST	2011	21Lakhs	Ongoing
4.	Development of Bistable memory Devices based on organic semiconductors	Dr. Vari Sivaji Reddy	DST	2013	21.84 Lakhs	Ongoing
5.	Quadruple Critical Point (QCP) in the Ternary System MEK+W+sBA	Dr. P.K. Madhavan Unni	FRG, NIT Calicut	Dec 2012	5 Lakh	Ongoing
6.	Transparent, Flexible and Conducting Electrodes based on Graphene-nanometal Hybrids	Dr. Aji A. Anappara (PI)	DST (Fast Track Scheme)	2013		Approved for funding
7	High Energy Density Photochemical Fuels based on Nanomaterial Hybrids	Dr. Aji A. Anappara (PI), Dr. C. Raghu, Dr. C. Lakshmi, Dr. P. Parameswaran	DST Nanomission	2013		Approved for funding

DEPARTMENT OF ARCHITECTURE

Sl. No	Title of the Project	Investigators	Sponsoring agency	Year of starting	Amount (Rs)	Status
1	Development of a Model framework for land use base Estimation and prediction of Solid waste generation in Small/Medium scale towns in India	Dr. P. P. Anilkumar Ar. Chithra K.	HSMI/ HUDCO	2013	20.16 Lacks	Ongoing

SCHOOL OF NANO SCIENCE & TECHNOLOGY

Sl. No.	Title of the project	Investigators	Sponsoring agency	Year of starting	Amount (Rs.)	Status
1	"Investigations on the Application of Catalytic Nanoparticles as Diesel and Bio Diesel Additives",	V.Sajith,C.B.Sobhan N.Sandhyarani Hanas.T	Hindustan Petroleum Corporation Limited (HPCL)	2010	1.20 Crores	Ongoing

2	"Design, Development and Optimization of Miniature and Micro Heat Pipes for Thermal Management of Avionic Devices	V.Sajith,C.B.Sobhan K Prabakaran Nair	Aeronautics Research & Development Board, DRDO	2009	10 lakhs	Ongoing
3	"Development of Nanofluids for Cooling Applications in Steel Industry",	Shijo Thomas, Hanas.T, Sajith V. and C. B. Sobhan	TATA Steel	2009	20 lakhs	Ongoing
4	"Holographic Studies on Mini Channels for Optimal Thermal Design of Microelectronic Systems	C.B.Sobhan V.Sajith,	Department of Science and Technology, Government of India	2009	20 Lakhs	Ongoing
5	Multifunctional plasmonic nanoparticles for target specific drug delivery: Synthesis, evaluation and toxicological studies	N. Sandhyarani	Dept. of Biotechnology	2008	45.18 Lakhs	Completed on September 2013
6	DSMC Simulation of Solid Rocket Exhaust Plumes	Sarith P Sathian	ARDB, DRDO	2010	20 Lakhs	Ongoing

SCHOOL OF BIOTECHNOLOGY

SI No	Title of the Project	Investigators	Sponsoring agency	Year of starting	Amount (Rs) lakhs	Status
1	Transcript profiling of differentially expressed gene(s) involved in the downstream step(s) leading to artemisinin biosynthesis on GA3 induction	PI: Dr. R. Aswathi Nair Co-PI: Dr. Padmesh P (JNTBGRI)	KSCSTE	2012	16.00	Ongoing
2	Design and In vitro Evaluation of the Neuroprotective Effects of HIF-Prolyl Hydroxylase Inhibitors against Ischemic Stroke	Rajanikant GK (Principal Investigator)	DBT	2012	50.19	Ongoing

11.5 FACULTY POSITION (As on 31.03.2013)

	<i>*Professor</i>	<i>*Asst. Professor</i>	<i>*Lecturer</i>	<i>Total</i>
Architecture				
Sanctioned	1	4	7	12
In Position	0	3	4	8
Vacant	1	1	3	4

Chemical				
Sanctioned	2	3	7	12
In Position	0	3	6	9
Vacant	2	0	1	3
Civil				
Sanctioned	6	12	23	41
In Position	13	5	12	30
Vacant	-7	7	11	11
Computer				
Sanctioned	5	9	19	33
In Position	3	3	15	21
Vacant	2	6	4	12
Electrical				
Sanctioned	5	11	22	38
In Position	10	3	13	26
Vacant	-5	8	9	12
Electronics & Communication				
Sanctioned	5	10	19	34
In Position	4	8	12	24
Vacant	1	2	7	10
Mathematics				
Sanctioned	3	5	11	19
In Position	2	6	07	15
Vacant	1	-1	04	4
Mechanical				
Sanctioned	10	14	28	52
In Position	13	5	16	34
Vacant	-3	9	12	18
Science & Humanities				
Sanctioned	2	5	11	18
In Position	3	4	7	14
Vacant	-1	1	4	4
Bio Technology				
Sanctioned	--	--	--	--
In Position	0	3	4	7
Vacant	0	0	0	0
Management				
Sanctioned	--	--	--	--
In Position	1	0	3	4
Vacant	0	0	0	0
Training & Placement				
Sanctioned	1	1	2	4
In Position	1	1	1	3
Vacant	0	0	1	1
Total				
Sanctioned	40	74	149	263
Additional Sanctioned	3	6	10	19
Grand Total	43	80	159	282
In Position	51	45	104	200
Vacant	8	35	55	82

11.6 ADMINISTRATIVE AND OTHER STAFF (Pre-NIT Pattern)

ADMINISTRATIVE STAFF-OFFICERS

Sl. No.	Designation	Name
INSTITUTE OFFICE		
1	Registrar	Dr.Santosh G Thampi
2	Dy Registrar (Admn)	Sri. P M Krishnan (Sr Audit Officer on deputation from AG's Office)
3	Dy Registrar (Finance)	Sri. C Unnikrishnan (Sr Audit Officer on deputation from AG's Office)
4	Dy Registrar (S&P)	Sri T Raghunathan
5	Dy Registrar (Academic)	Sri. M Radhakrishnan
6	Internal Audit Officer	Sri. V Muraleedharan (Sr. Audit Officer, on deputation from AG's office)
7	Asst. Registrar	Vacant
8	Financial Assistant	Vacant
9	Senior Superintendent	Smt. Devaki.P.P
10	Senior Superintendent	Smt. Rugmini.C.P
LIBRARY		
11	Librarian	Vacant
12	Librarian (Gr.II)	Vacant
HOSPITAL		
13	Lady Medical Officer	Vacant
14	Resident Medical Officer	Dr. (Ms.) A.A. Celine
ENGINEERING UNIT		
15	Asst. Exe. Engineer	Vacant
	Divisional Accountant	Smt. Beena John
HOSTEL OFFICE		
16	Hostel Manager	Vacant
TPL		

NON TEACHING STAFF STRENGTH

Sl. No	Designation	Sanctioned
COLLEGE & DEPARTMENTAL OFFICES		
1	Junior Superintendent	6
2	P.A. to Director	1
3	U.D. Clerk	20
4	L.D. Clerk	19
5	Fair Copy Superintendent	1
6	Typist/Data Entry Operator	5
7	Confidential Assistant	9
8	Duplicating Machine Operator	1
9	Store Keeper	4
10	Duffedar	1
11	Peon	18
ENGINEERING UNIT		
1	Assistant Executive Engineer	Vacant
2	Assistant Engineer (Electrical)	
3	Assistant Engineer (Civil)	2
4	Overseer Gr.I /Sr. Mechanic	2
5	Draftsman Gr. I.	1
6	Overseer Grade III	2
7	Mechanic (Water supply), Plumber/ Mason Trade	6
8	Mechanic (EMU)	5
9	Senior Mechanic (Engg. Unit)	9
10	Senior Mechanic (EMU)	5
i. LIBRARY		
1	Librarian Gr. III	1
2	Librarian Gr. IV	9

3	Attender, Library	6
4	Bookbinder	1
5	Graphic Artist	1
6	Offset Machine Operator	1
7	Digital Library Technician	1
ii. HOSPITAL		
1	Staff nurse	2
2	Pharmacist	1
3	Attender Hospital	1
iii. HOSTEL		
1	Stewards	5
2	Matron-Ladies Hostel	1
iv. GUEST HOUSE		
1	Guest House Manager	1
2	Cook-cum-butler	1
3	Bearers-cum-Room boy	2
v. COLLEGE VEHICLES SECTION		
1	Driver	4
2	Vehicle Cleaner	2
vi. WATCH AND WARD STAFF		
1	Sergeant	1
2	Watchmen	6
3	Watchman-cum-Gardener	16
4	Gardener	1
vii. SANITATION		
1	Sanitation worker	16
2	Sweeper-cum-Sanitation worker	6
3	Part-time Sweeper	25

NON-TEACHING STAFF (ACADEMIC)

DEPARTMENT OF CIVIL ENGINEERING		
1	Instructor	1
2	Senior Mechanic, Lab Technician	9
3	Mechanic	4
DEPARTMENT OF ARCHITECTURE		
1	Senior Mechanic	2
2	Draftsman Gr. II	1
DEPARTMENT OF ELECTRICAL ENGINEERING		
1	Instructor	1
2	Senior Mechanic	11
3	Mechanic	2
DEPARTMENT OF ELECTRONICS & COMMUNICATION ENGINEERING		
1	Instructor	1
2	Senior Mechanic, Lab Technician	4
3	Mechanic	3
DEPARTMENT OF COMPUTER SCIENCE ENGINEERING		
1	System Analyst	1
2	System Programmer	1
3	Computer Operator	1
4	Computer Technician	1
5	Senior Mechanic	1
6	Mechanic	5
DEPARTMENT OF MECHANICAL ENGINEERING		
1	Draughtsman Gr. I	1
2	Foreman	1
3	Supervisor	2
4	Instructors	2
5	Senior Mechanic	25
6	Mechanic	7

CENTER FOR BIO-MECHANICS		
1	Senior Mechanic	1
2	Mechanic	1
DEPARTMENT OF SCIENCES & HUMANITIES		
1	Lab Assistant	4
TRAINING AND PLACEMENT CELL		
1	Marker	2

11.7 STAFF MEMBERS DEPUTED/SPONSORED FOR TRAINING, LEARNING

DEPARTMENT OF CIVIL ENGINEERING

Staff members deputed/sponsored for Training, Learning: 3

DEPARTMENT OF ELECTRICAL ENGINEERING

Sl.No.	Name	Title of the program	Duration	Organization
1.	Sindhu T K	Electromagnetic Compatibility	Jul 18-19	SAMEER, Chennai
2	Ashok S	ISTE -ICT Workshop on AKASH for Education	10-11 Nov 2012	IITB-NITC

TECHNICAL TRAINING TO NON TEACHING STAFF

Sl. No	Name of the Staff	Title of the Programme	Duration and Period	Organization
1	1.Venugopal .A, JS,Hostel Office. 2. Praveen Kumar.P (UDC),Purchase Section 3. Unni Krishnan. K, UDC,Academic	Constituional Provisions in services- Reservations/Concessions- Preparation of Rosters for small cadars	22 nd to 24 th August, 2012	M/s.Parsam Institute of Statutuory Rules, Bangalore
2	Beljith.P,Sr.Mechanic, CSED	Ethical Hacking & Computer Measures	8 th to 12 th October, 2012	The Institution of Engineers(India)-Engineering Staff College of India,Hyderabad.

11.8. SCHOLARSHIPS & AWARDS

CREC Silver Jubilee Endowment Trust Scholarships

CREC Silver Jubilee Endowment Trust (SJET) of the Institute, a registered body with the Director as Chairman, Deans & Heads of Departments as ex-officio and other nominated members as Trustees, currently awards 93 scholarships worth Rs. 5000 to 10000/- each per annum to the students. The number and the value of the scholarships for a year will vary depending on the availability of funds and the sponsors. The SJET will invite applications from the students and Heads of the departments/ a sub-committee will scrutinize the applications, and verifies the data with the students and others. The scholarships are awarded to the deserving students based on their academic merits, economic backwardness and other performance parameters. The SJET scholarships include.

Sl.No.	SCHOLARSHIPS
1.	Prof. A. O. Kunjipaulo Endowment Scholarship
2.	Class of 1992 Computer Engineering Alumni Scholarship
3.	RECCAA, Singapore Scholarship
4.	RECCAA, USA Scholarship
5.	RECCAA, Bahrain Scholarship
6.	REC 1 st Batch Scholarship
7.	RECCAA, Mumbai Scholarships (2 Nos.)

8.	CSAI (Class of 2000) Scholarships (4 Nos.)
9.	REC 76 – 81 Batch Scholarships (2 Nos.)
10.	10 years of XXXII nd Batch (CREC 96) Scholarship
11.	REC Calicut 1982 Batch Scholarship
12.	NITC (REC) 1983 Batch Scholarship
13.	REC Calicut, Class of '84 Trust Scholarship
14.	CREC 80-85 Batch Scholarship
15.	Padmanabhan Scholarship in Memory of All Departed Souls of 77 Batch, CREC
16.	Capt. Mohammed Memorial Endowment Scholarship
17.	Nitin Sharma Memorial Scholarship
18.	1997 – 2001 CSE B. Tech. Batch Scholarship
19.	Joseephus M T, John Sebastian & Luthufi K T Memorial Scholarship 2004-08 Batch
20.	Mariveetil Raghunath Memorial Endowment Scholarship
21.	1984-88 Batch of REC/NITC Scholarship

In addition to the above scholarships, **PTA** awarded scholarships worth 2 lakh to 27 students and **NITC Hostels** awarded 21 scholarships ((1.05 lakh), both these scholarships were processed through SJET.

11.9 THE PARENT TEACHER ASSOCIATION

A report on Important Activities of PTA during the year 2012-2013

CREC Parent –Teacher Association had originated as a charitable society keeping the objective of developing the educational, cultural, and training activities of students who are admitted in CREC (presently NIT Calicut (NITC)) on a no-profit no-loss basis. In 2011, Dr. V.K. Govindan, Dean Academic, Dr.S.D Madhu Kumar, Associate Professor & Head of the Department of Computer Science & Engineering , and Mr. Raghu C V, Asst. Professor of ECED were nominated as President, Secretary, and Joint Secretary cum Treasurer, of CREC-PTA, respectively. As Mr. Raghu C.V had gone for higher studies at IISc, the Director appointed Dr.Arun.P, Assistant Professor , MED as the Joint Secretary cum Treasurer during September 2013

During the year 2012-13, PTA organized several meetings and had given financial assistance to many students of NITC. Some of the major activities are listed below.

1. An office room for CREC PTA was setup in the New Administrative Block of NITC. A telephone (2286126) connection and internet connection was obtained for the new office. A new email id was been created (crecpta@gmail.com). The official website for CREC-PTA was developed and was formally launched by Dr.V.K. Govindan, PTA President during the Annual General Body meeting held on 12-01-2013. The website is <http://www.nitc.ac.in/crecpta>.
2. Essential office furniture, a desktop computer and a printer were purchased and installed in the new office. Updation and maintenance of all the records is being carried out since then, with the help of an office assistant who is hired on a daily-wage basis.
3. Department level PTA meetings were organized during the Monsoon 2012 semester in all the departments. Some departments conducted more than one meeting. More than 1000 parents in total attended these meetings. All the department heads have welcomed this move and the departments received many constructive suggestions and feedback from the parents.
4. Cash awards (Rs.5,000/ each) were given to all the branch toppers (35 students) during the convocations held on October 17, 2012. Rs.1,75,000/- was spent for this activity.
5. CREC-PTA gave financial support for several needy students for paying their tuition fees, hostel fees mess bills and medical assistance, for those students whose cases were recommended by the Dean Students Welfare, HODs and the Chief Warden.

6. A financial support of Rs. 1,00,000/- was given to Ragam 2013, the major annual cultural festival hosted by the students of NITC.
7. Scholarships were given to financially needy students under SJET Trust scholarship scheme.
8. A database of all the parents including their postal address, telephone number and email ids has been prepared. The department co-coordinators of PTA are also now keeping databases of the contact details of all the parents.
9. Travel fellowships were given to more than nine students for presenting papers in international conferences held in India. More applications are being processed. The details are regularly posted on the CREC home page.
10. All the departments conducted Department wise PTA meeting during the monsoon and winter semesters. The PTA Annual General Body meeting was held on 12-01-2013. Department level PTA meetings were held on the same day during the forenoon session. More than 800 parents participated the meetings held on 12-01-2013.
11. Five Water filters cum coolers were purchased and installed in five different departments of NIT Calicut(CSE, ECE, EE, CE and ME departments) during March 2013.
12. CREC-PTA is currently working towards providing Ambulance Service for the NITC community to deal with Medical Emergency situations.
13. An Electronic class room was setup in the Central Computing Centre with the financial assistance from the PTA for screening online lectures, webinars etc.

11.10 NATIONAL SERVICE SCHEME

National Service Scheme: Report 2012-13

National Institute of Technology Calicut has four National Service Scheme (NSS) units with a total volunteer strength of 400. NSS is a part of the Under Graduate curriculum of NITC and it is compulsory that each student has to complete 42 contact hours of work of social relevance to get a pass grade in the course. Following is a brief report of our activities in the year 2012-13.

National service scheme, NIT cell actively participated in blood donation activities this year. An engineering entrance coaching class programme for the poor higher secondary students has been going on as a part of our educational programmes. The cell did many social activities in association with pain & palliative society. About 20 volunteers donated their blood for people under treatment. This year NSS is initiated for constructing shelter to a poor family nearby the campus. Many cultural events have been conducted at the institute. In December NSS conducted a special camping programme at Wayanad. The main works volunteers done there are special coaching programme for school students, a survey for gramapanchayath and health awareness programmes.

11.11 Training & Placement Statistics

PLACEMENT 2012- 13

NO	Date	COMPANY	TOTAL UG	AR	MCA	PG	TOTAL	Effective Total
1	25.07.12	Broadcom10.2/11.2L	11				11	11
2	28.07.12	Facebook65L	0				0	11
3	29.07.12	Amazon 17L	4			1	5	16
4	31.07.12	Bajaj 7L	2				2	18
5	01.08.12 02.08.12	GS 11L	9				9	27
6	02.08.12 03.08.12	Texas 10.5/11.3L	6			1	7	34
7	04.08.12 05.08.12	Oracle ST 10L	7			2	9	43
8	04.08.12 05.08.12	Oracle mysql10L	2			1	3	46
9	04.08.12 05.08.12	Oracle App 8L	5				5	51
10	04.08.12 05.08.12	OracleFSS 6.5L	3		2		5	56
11	05.08.12	Google25L/60LUS					0	56
12	06.08.12	Paypal10.5-12L	4				4	60
13	07.08.12 08.08.12	ZS 7.2L	10				10	70
14	08.08.12 09.08.12	NetApp 10L	3				3	73
15	09.08.12 10.08.12	Commval7L	1		2		3	76
16	10.08.12	S J & Co 3.1L	3				3	79
17	10.08.12 11.08.12	Yahoo 10.3L	0				0	79
18	11.08.12 30.10.12	Maruthi 5.4L						-
19	12.08.12	Cypress8.6/9.5L	2				2	81
20	13.08.12	Pepsico6L	2				2	83
21	13.08.12 14.08.12	Cdot8.2L	6				6	89
22	14.08.12 15.08.12	McAfee 8/9L	2			1	3	92
23	15.08.12	Zynga 11.5L	3		1	2	6	98
24	16.08.12	Tata Motors 6L	9				9	107
25	16.08.12	Deloitte6.25L	22		1	2	25	132
26	17.08.12	KLATencore 10L	0		1		1	133
27	18.08.12 19.08.12	Musigma 6L	5				5	138
28	20.08.12 21.08.12	ARM 9L	2				2	140
29	31.08.12	Ittiam 6.75L	1				1	141
30	03.09.12	LG 5.5/6L	10			4	14	155
31	04.09.12	Cavium5.5L	4			1	5	160

32	05.09.12	UTC Aero4.5L	8				8	168
33	06.09.12	Verizon5.2/5.3L	4				4	172
34	07.09.12	Sandvine9L	3				3	175
35	10.09.12	Bosch4.2L	2			1	3	178
36	11.09.12	ESSAB4.2L	2				2	180
37	12.09.12	E&Y4.2	0				0	180
38	13.09.12 14.09.12	SAP 7L	3			1	4	184
39	15.09.12	Accolite6.5/7L	1			1	2	186
40	15.09.12 16.09.12 17.09.12	Samsung SEL6.7/8 L	5			1	6	192
41	17.09.12 18.09.12	Verchaska6-8L	1		1		2	194
42	19.09.12	Hero 4.9L	4				4	198
43	20.09.12	Finisar Ma8-9L	4				4	202
44	21.09.12	Telcon 6L	0				0	202
45	23.09.12	Future First 8L	2				2	204
46	24.09.12	Renesas Mob 5.3L	2				2	206
47	26.09.12	Arbitron 5.2L	4				4	210
48	27.09.12	Intel ppo 12L				3	3	213
49	28.09.12	Quest Global3/3.3	9			4	13	226
	01.10.12	Google70LUS\$130000				1	1	227
50	06.10.12	Accenture 5.6L	7				7	234
51	05.10.12 07.10.12	Hyndai 5.2L	2				2	236
52	08.10.12 09.10.12	IBM-ISL 6.5L				1	1	237
53	09.10.12	Navy						-
54	10.10.12	Dr Reddys Lab 5.7L	3				3	240
55	14.10.12 16.10.12	ABB 4.7L	2				2	242
56	18.10.12 19.10.12	Relience 5.5L	20				20	262
57	29.10.12	Flytxt mob 10L				1	1	263
-	11.08.123 0.10.12	Maruti 5.4L	4				4	267
58	30.10.12	Virtusa 4.5L	10				10	277
59	05.11.12	Head strong 4L	8				8	285
60	07.11.12	Oracle GS 7L	1			1	2	287
61	07.11.12 08.11.12	Ericsson 3.6L	17				17	304
62	08.11.12 09.11.12 10.11.12	L&T 3.8L					17	321
63	09.11.12	Bullfinch 5.5L			2		2	323
64	15.11.12	FMC Tech 5.2L	3				3	326
-	20.11.12	Intel ppo 12L				3	3	329
-	03.12.12	Pepsico6L	1				1	330
65	04.12.12	Fostwheler 4.2/4.6L	4			2	6	336
66	05.12.12	BPCL 10L	10				10	346
67	07.12.120 8.12.12	Bosch MT 4.7L	5				5	351
68	10.12.12 11.12.12	Ingersoll Rand 4.5L	7				7	358
69	13.12.12	Synopsis 10L/10.5L	4				4	362
70	15.12.12	Intergraph 3.9L	7				7	369
71	17.12.12 18.12.12	Total Envn 3.8L	2				2	371

72	19.12.12 20.12.12	Genesys 6.5L	1				1	372
73	16.12.12 03.01.13	L&T ECC 3.6/3.8L	4	2			6	378
-	04.12.12	Fostwheler 4.2/4.6L	1				1	379
74	04.01.130 5.01.13	Suntech 4L	5				5	384
75	05.01.13 06.01.13 07.01.13	TCS 3.1/3.3L	28		11	6	45	429
76	15.01.13	Sudharsan Chem 3 L	3				3	432
77	16.01.13	Dolcera 5.5/9L	0				0	432
78	17.01.13	Triune 3.6L	4				4	436
79	19.01.13	iGate 3.5L	-				0	436
80	19.01.13	Petrofac 3.6L	3				3	439
81	24.01.13 25.01.13	Magneti3.5 Marelli 4L	6			1	7	446
82	28.01.13	VIT 6LPhD	-				0	446
83	28.01.13	G E 6.6L	-			4	4	450
84	31.01.13 01.02.13	PolarisFT 4.25L	9				9	459
85	01.02.13	Technip5L					0	459
86	02.02.13	Sobha Dev 3.1L						-
87	04.02.13	Tataelxi 3.1/3.4L	5			3	8	467
88	09.02.13	Oracle ST 8.5L	0			3	3	470
89	12.02.13 13.02.13	HSCC 6L	3				3	473
-	13.02.13	Intel 10L				1	1	474
90	14.02.13	I b s 3L	5				5	479
91	16.02.13	Nokia seimans5L	1			2	3	482
92	18.02.13 10.03.13 02.04.13	MRF 3.5L	2				2	484
93	20.02.13 25.02.13 08.04.13	Saint Gobain 4.5	0				0	484
94	04.03.13	BPL 3L	-				0	484
-	07.03.13	L&T ECC 3.6/3.8L	6	3			9	493
95	13.03.13	Aryaka network6L	-					-
96	15.03.13	Tejas Engg 4L	-			3	3	496
97	15.03.13	RGUKT4L	-				0	496
98	18.03.13	MILcont 3L						496
99	18.03.13	GPRE College 4L	-					496
100	19.03.13	KIIT 4L	-			1	1	497
101	19.03.13 23.03.13	KITCO 3L	4	1		3	8	505
102	23.03.13	H PC L 10L	6				6	511
103	23.03.13	Tismo 3L	1		1		2	513
104	24.03.13 25.03.13	L&T tech Serv 3/3.5L	6			3	9	522
105	25.03.13	IOCL 10L	10				10	532
-	25.03.13	Sobha Dev 3.1L	4				4	536
106	01.04.13	PRDC						

107	11.04.13	AI Adrak 6.5L	9				9	545
108	11.04.13	ITD Cemnt 3.9L	4				4	549
109	01.05.13	ONGC	14				14	563
110	02.05.13 03.05.13	Fed Bank 5.6L	0			4	4	567
111	07.05.13	Vedanta 4.5L	12				12	579
112	07.05.13	Amrtha 4L				2	2	581
-	17.05.13	GPREC 4L				3	3	584
-	30.05.13	Oracle ST 9L				8	8	592
-	28.01.13	G E 6.6L				1	1	593
-		L&T ECC 3.8L				5	5	598
			482	6	22	88		598